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IN THE

SUPREME COURT OF THE UNITED STATES

No. 62. October Term, 1937.

TEXTILE MACHINE WORKS,
Petitioner,

vs.

LOUIS HIRSCH TEXTILE MACHINES, Inc.,
Respondent.

On Certiorari to the Circuit Court of Appeals for the Second Circuit.

PETITIONER'S BRIEF.

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INDEX.

	Page
Opinions of the Courts Below	1
Jurisdiction	2
Statement of the Case	2
Patent in Suit	5
The Full-Fashioned Knitting Machine	6
The Yarn Guide Carrier Bars	7
Narrowing	8
The Schletter Attachment	10
What the Attachment Does	12
Commercial History of the Patented Attachment	14
The Claims in Suit	15
The Gotham Device	17
The Nusbaum Machine	18
Opinion of the Court of Appeals (R. II, p. 769)	19
Summary of Argument	19
Argument	21
I. The Gotham device was not an anticipation of the patent in suit	21
II. As compared with the Gotham device, the attachment of the patent in suit represents a real invention	21
III. The Nusbaum machine was not an anticipation of the claims in suit and it did not approach the Schletter invention	28
IV. The Court of Appeals was in error in combining, or attempting to combine, "Gotham" and "Nusbaum" to defeat the claims of the patent in suit	30
V. The commercial history of the attachment of the patent in suit negatives the plea of lack of invention	32

Page

Other Defenses 36

A. Alleged Insufficiency of Disclosure 36

B. Alleged Inoperability of the Device of the Patent in Suit 39

(1) Failure of the patent in suit to show narrowing cams 39

(2) Omission of mechanism for lifting or taking stops 7 out of operation 40

C. Invalidity for Alleged Anticipation by One or More of Sundry Pleaded Prior Patents 41

D. Invalidity of the Patent in Suit for Alleged Want of Commercial Utility 42

E. Alleged Delay in Filing a Disclaimer 44

F. Infringement 46

Conclusion 48

Appendix A—Opinion — Avis, J. — Textile Machine Works vs. Alfred Hofmann, Inc. (D. C., N. J.) 4 Fed. Suppl., 837 49

Appendix B—Opinion — Buffington, J. — Alfred Hofmann, Inc. vs. Textile Machine Works (C. C. A. 3rd), 71 Fed. (2nd), 973 58

Appendix C—Discussion of Prior Patents Advanced by Defendant as Anticipations 60

TABLE OF AUTHORITIES CITED.

	Page
Aluminum Colors, Inc. v. U. S. Research Corp., 7 Fed. Suppl. 609	44, 45
American Bell Telephone Co. v. Spencer, 8 Fed., 509	44
Barber v. Otis Motor Co., 231 Fed., 755 (762)	47
Bates v. Coe, 98 U. S., 31 (48)	42
Bay State Optical Co. v. Klein, 20 Fed., (2nd), 915	45
Burden v. Corning, 4 Fed. Cases, 701 (710)	44
Bragg-Kliesrath v. Farrell, 36 Fed. (2nd), 845	24
Carnegie Steel Co. v. Cambria Iron Co., 185 U. S., 403, 437	40
Diamond Rubber Co. v. Consolidated Co., 220 U. S., 428	24, 25
Ensten v. Simon Ascher Co., 282 U. S., 445	45
Gamewell Fire Alarm Tel. Co. v. Municipal Sig. Co., 77 Fed., 490	44
Hobbs v. Beach, 180 U. S., 383 (392)	22
Imhaeuser v. Buerk, 101 U. S., 647 (660)	42
Lowell v. Triplett, 77 Fed. (2nd), 556	45
Malina v. Grisman, 20 Fed. (2nd), 406	47
Nat'l Cash Reg. Co. v. Boston Cash Indicator Co., 156 U. S., 502 (514)	22
Paramount Publix Co. v. American Tri-Ergon Corp., 294 U. S., 464 (474)	36
Permutit v. Wadham, 13 Fed. (2nd), 454	45
Sam'l B. Smith v. E. H. Snow, et al., 294 U. S. 1	48
Sirocco Eng. Co. v. B. F. Sturtevant Co., 209 Fed., 624	44
Stebler v. Riverside Heights Asso., 205 Fed., 735 (739)	47
Temco Electric Co. v. Apco Mfg. Co., 275 U. S., 319	24, 47
Textile Mach. Works v. Alfred Hofmann, Inc. (C. C. A., 3rd), 71 Fed. (2nd), 973	2
Textile Mach. Works v. Alfred Hofmann, Inc. (D. C. N. J.), 4 Fed. Suppl., 837	2
Thropp & Sons v. DiLaski, 226 Fed., 941 (947)	24
Topliff vs. Topliff, 145 U. S., 156	21

TABLE OF AUTHORITIES CITED (Continued).

	Page
Trussell Mfg. Co. v. Wilson-Jones Co., 50 Fed. (2nd), 1027 (1030)	44
United Chromium, Inc. v. Internat'l Silver Co., 60 Fed. (2nd), 913	45
Webster Loom Co. v. Higgins, 105 U. S., 580 (586)	38, 40
Westinghouse Co. v. Precise Corp., 11 Fed. (2nd), 209	48
White Co. v. Converse & Son, 20 Fed. (2nd), 311	22
Worden v. Searls, 21 Fed., 406	44
Wright Co. v. Herring-Curtiss Co., 211 Fed., 654, 655 (C. C. A. 2nd)	48
Zell v. Bankers' Utilities Co., 77 Fed. (2nd), 22	44

STATUTE CITED.

Section 240 (a) of the Judicial Code as amended by the Act of February 13, 1925, c. 229 (28 U. S. C. A., Sec. 347)	2

TEXT BOOKS.

Walker on Patents (6th Ed.), 496, Sec. 409	47

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TEXTILE MACHINE WORKS,
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vs.

LOUIS HIRSCH TEXTILE MACHINES, INC.
Respondent.

BRIEF ON BEHALF OF TEXTILE MACHINE WORKS, PETITIONER.

This is a patent infringement suit in equity in usual form brought here on certiorari to the United States Circuit Court of Appeals for the Second Circuit.

Opinions of the Courts Below.

The opinion of the Circuit Court of Appeals for the Second Circuit (Circuit Judges Learned Hand, Swan and Augustus N. Hand) written by Judge Learned Hand, appears at R. II, 769. It is reported in 87 Fed. (2nd), 702. The opinion of the District Court for the Southern District of New York, written by Judge Lindley, appears at R. II, 787. It is reported in 13 Fed. Suppl., 476.

The opinion of the Circuit Court of Appeals for the Third Circuit (Circuit Judges Buffington, Woolley and

Davis) written by Judge Buffington, in a suit involving the same patent and referred to herein as the Hofmann suit, is reported 71 Fed. (2nd), 973. Copy annexed as Appendix B. The opinion of the District Court for the District of New Jersey in the Hofmann suit, written by Judge Avis, is reported 4 Fed. Suppl., 837. Copy annexed as Appendix A.

JURISDICTION.

The jurisdiction of this Court is invoked under Section 240 (a) of the Judicial Code as amended by the Act of February 13, 1925; c 229 (28 U. S. C. A., sec. 347). The decree of the Circuit Court of Appeals for the Second Circuit was entered February 8, 1937 (R. II, 774). Petition for re-hearing was denied on March 2, 1937 (R. II, 775). The Petition for Writ of Certiorari herein was filed May 15, 1937, and granted June 1, 1937.

STATEMENT OF THE CASE.

Petitioner (plaintiff in the District Court and appellee in the Court of Appeals—hereinafter referred to as Plaintiff) is Textile Machine Works, a Pennsylvania corporation, manufacturer of full-fashioned knitting machines, with its plant at Reading, Pennsylvania. Respondent (defendant in the District Court and appellant in the Court of Appeals—hereinafter referred to as defendant) is Louis Hirsch Textile Machines, Inc., a New York corporation with a principal place of business at New York City. Defendant is the American sales representative of Karl Lieberknecht, a manufacturer of knitting machines in Germany. The devices (attachments for full-fashioned knitting machines) charged to infringe were originally manufactured in Germany and imported here by the de-

fendant. Defendant is now manufacturing the attachments here and selling them in connection with the imported knitting machines.

Defendant in the Hofmann suit was the American sales representative of another German manufacturer of knitting machines. The defendants in the two cases have cooperated in their effort to destroy the patent,—the defendant in this case having contributed to the defense of the former suit, and the Hofmann Company, defendant in the former suit, contributing to the defense of this suit,—the defendant's counsel in both cases being the same (R. I, 227).

The patent in suit is No. 1,713,628, issued May 21, 1929, on the application of Richard E. Schletter, of Philadelphia, for an Attachment for Flat Knitting Machines. The claims involved are Claims 1, 3, 14 and 15.

The Bill of Complaint is in usual form (R. I, 1). Defendant in its Answer (R. I, 5-11) raised numerous defenses, attacking the patent for insufficiency of disclosure, anticipation, lack of invention in view of certain prior commercial structures, lack of utility, etc.; and also denied infringement. The case came on for trial before the District Court (Walter C. Lindley, J.), and after an extended trial, the Court rendered its opinion (R. II, 737), overruling all defenses, sustaining the validity of the patent, and a decree was entered awarding injunction and reference for an accounting (R. II, 762).

On appeal to the Circuit Court of Appeals for the Section Circuit, that Court reversed the decree of the District Court and ordered the dismissal of the Bill on the ground of invalidity of the claims in suit for want of invention in view of two prior-use devices coupled together —referred to in the case as the "Gotham" attachment and the "Nusbaum" device. (Opinion R. II, 769).

Prior to the trial of the instant case, the patent in suit had been sustained by the United States District Court

for the District of New Jersey and by the United States Circuit Court of Appeals for the Third Circuit in a suit brought by petitioner against Alfred Hofmann, Inc. In the Hofmann suit the defendant had raised substantially the same defenses above referred to, including the defense of lack of patentable invention in view of the "Gotham" and "Nusbaum" prior uses. The case was fully tried before the District Court (John Boyd Avis, J.), and that Court rendered its opinion (Appendix A), sustaining the patent as to the claims in suit, namely Claims 1, 3, 14 and 15 (the same claims subsequently involved in the Hirsch suit at bar) and finding infringement. Upon appeal by the defendant, Alfred Hofmann, Inc., to the United States Circuit Court of Appeals for the Third Circuit, that Court affirmed the decree (Appendix B). The defense of lack of invention, overruled in the Hofmann suit in the Third Circuit but sustained in the instant case in the Second Circuit, was the same defense in both cases,—the evidence with respect to the "Gotham" and "Nusbaum" prior uses being stipulated into the instant case from the record in the Hofmann case (R. I, 14). The Court of Appeals for the Second Circuit refused to follow the decisions in the Third Circuit involving the same patent, the same claims of that patent, and substantially the same record so far as concerns the said particular defense.

As appears from the opinion of the Circuit Court of Appeals in the instant case, that Court having reached the conclusion that the claims in suit are invalid for want of invention, found it unnecessary to pass on the other defenses which had been overruled in the Third Circuit but again presented to the Courts of the Second Circuit in the instant case.

The other defenses presented to the Court of Appeals in the instant case, and not passed on, were:

(a) Invalidity of the patent in suit on the ground of insufficiency of disclosure. (Infra p. 36)

(b) Invalidity of the patent in suit because of alleged inoperativeness of the machine shown and described. (Infra p. 39)

(c) Invalidity of the patent in suit for alleged anticipation by one or more of sundry pleaded prior patents. (Infra p. 41)

(d) Invalidity of the patent in suit for alleged want of commercial utility. (Infra p. 42)

(e) Unenforcibility of the patent in suit because of delay in filing a disclaimer. (Infra p. 44)

(f) Non-infringement. (Infra p. 48)

None of these listed defenses presents an issue involving conflict between the Courts in the two Circuits.

Patent In Suit.

The subject of the patent is an attachment for a well-known machine, referred to in the patent as a flat knitting machine for making hosiery of full-fashioned type, or more briefly, a full-fashioned knitting machine.

The significance of the term "attachment" lies in the fact that the device is applied, or adapted to be applied, to a well-known machine, complete in itself, the device of the patent being an added mechanism, adapted to operate and be operated in conjunction with all of the regular parts of the known machine. The attachment may be applied to machines previously installed and in use or may be furnished as part of the equipment of a new machine.

The full-fashioned knitting machine referred to in the patent, is the conventional "Cotton" machine as developed for the manufacture of full-fashioned stockings. This is to be distinguished from certain other types of knitting machines, such as the circular machine, the independent

needle machine, and machines designed primarily for the making of knitted underwear,—all of which will be referred to later.

The Full-Fashioned Knitting Machine.

The machine is a highly complex piece of mechanism. In the patent drawings, the only parts of the full-fashioned knitting machine which are shown are certain portions of the frame members numbered 1, 2, 3 and 4, the main cam shaft 5 and some of the yarn guide carrier bars 6; and these parts are shown in only a fragmentary and diagrammatic manner.

A general idea of the machine as a whole can be obtained from the large photograph, Plaintiff's Exhibit 7 (offered R. I, 21)—a photograph of a twenty-four section machine. Reference may also be made to sundry photographs reproduced in Volume II of the printed Record.

On the full-fashioned knitting machine the stockings are knit in the form of flat blanks,—the blank, when completed, being folded over and seamed at the free edges to form the stocking. The complete blank is knit on two separate machines—one known as the legger and the other as the footer. The leg blank is knit on the legger, then removed from that machine and finished on the footer. Plaintiff's Exhibit 4 (offered R. I, 18) is a leg blank, and Plaintiff's Exhibit 5 (offered R. I, 18) is the complete blank, including both leg and foot. A typical form of leg blank is shown in the drawing, Plaintiff's Exhibit 18 (R. II, 368),—the so-called heel tabs being shown at the bottom of the blank; and the drawing on page 11 of plaintiff's booklet, Plaintiff's Exhibit 6 (offered R. I, 20) shows the complete blank, including leg and foot portions, and illustrates the manner in which the heel tabs are turned when the leg blank is run onto the footer, preparatory to the knitting of the foot portion.

An explanation of the general construction and oper-

ation of the full-fashioned knitting machine is found at pages 18 et seq. R. I, in connection with various illustrative exhibits, particularly the booklet, Plaintiff's Exhibit 6. On the machine illustrated in the photograph, Plaintiff's Exhibit 7, above-referred to, blanks for twenty-four stocking legs are knit at one time, the machine having twenty-four sections, and the motions on one section being duplicated simultaneously on the other twenty-three. The machine has upwards of 12,000 needles, and the mechanisms required to give the necessary cycle of movements to these needles and to accomplish all of the other numerous movements of the parts of the machine are operated from a single cam shaft—a long shaft running through the entire length of the machine.

The Yarn Guide Carrier Bars.

A characteristic of the Cotton type of machine is that the yarn guides are mounted on reciprocatory carrier bars. These bars run lengthwise of the machine and are the bars which are indicated by the numbers 6 in Figs. 2 and 3 of the drawings of the patent in suit. The guides may also be seen marked H on pages 14, 15, 16, 17 and 18 of the booklet Plaintiff's Exhibit 6. These yarn guides are mounted along the length of each carrier bar, each bar carrying one guide for each section of the machine throughout its length, and the total reciprocating movement of the carrier bars is approximately the width of a single section, so that a yarn guide may be made to traverse the width of the section and lay the yarn in position to be operated upon by the needles of that section. The reciprocation of the carrier bars is accomplished by mechanism operated from the main cam shaft. The extent of movement of the reciprocatory carrier bars is automatically controlled by the end stops, and the position of these end stops can be adjusted automatically in one direction only, so as to change the stroke of the carrier bars. This

operation is required in connection with the fashioning or narrowing of the blank to make the finished stocking approximate the shape of the leg or foot, and this subject is referred to under the general heading of "narrowing motion", commencing at page 32, R. I.

Narrowing.

Narrowing involves not only the adjustment of the end stops gradually to shorten the stroke of the carrier bars with their yarn guides, but more particularly involves the operation of the so-called narrowing points to receive some of the outer loops of the fabric from their needles and to transfer those loops to inner needles. At page 32, R. I, the action of the narrowing points is described and the mechanism for moving the points is described at pages 32 to 36, R. I.

The narrowing head is described at pages 32 to 36, R. I, by reference to the aluminum model, Exhibit 11, and Figs. 27 and 28 on pages 40 and 42 of Exhibit 6. The narrowing heads are located on each end of the machine, and each carries two spindles L and K, as shown in Fig. 28, page 42, Exhibit 6. K is the spindle which controls the movement of the narrowing slides to move the narrowing points (explained R. I, 32). The spindle K is a reversely threaded spindle, some times being turned automatically in one direction only, and at other times being turned a distance corresponding to two needles in one direction, and then turned a distance of one needle in the opposite direction.*

The other operation involved in narrowing, to wit, the adjustment of the end stops to shorten the throw of the

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* It will, of course, be understood that the work accomplished by the reversely threaded spindle in moving the slides M and N, and thereby bodily moving the point bars, is entirely different from the function performed by the reversely threaded spindle forming part of the attachment of the patent in suit, said spindle in the patent in suit carrying nuts or stops for controlling the recip[illegible]y movement of the carrier bars by cooperation with abutments suitably placed on the carrier bars.

yarn guide carrier bars is explained at pages 34, 35, R. I. The end stops are readily seen in the aluminum model, Plaintiff's Exhibit 11, and see R. II, 365, and p. 40 of Exhibit 6. In the illustration on page 42, Exhibit 6, the series of stops, one for each carrier bar, are marked S. They are mounted on the nut Q, which is in turn carried by the threaded spindle L, and this spindle can be turned inwardly by a pawl and ratchet mechanism shown at the left-hand end of the illustration, adapted to be operated through connecting mechanism from the main cam shaft. The rotation of the spindle L will cause the nut Q, carrying the end stops, to move toward the right and thereby position the stops so as to shorten the stroke of the carrier bars. A similar arrangement is at the opposite end of the machine carrying and controlling the end stops at that end. In the illustration, the series of carrier bars, seven in number, are shown broken away to permit the spindle L to be seen. It is to be noted that while the slides M and N, which move the narrowing points, are mounted on a reversely threaded spindle, the spindle which carries and controls the movement of the end stops S is an ordinary spindle threaded in one direction only. The spindle which moves the end stops at the opposite end of the machine is just like spindle L, but threaded in the opposite direction.

The spindles on the narrowing head for moving the narrowing points and the end stops *are, and must be, worked together*, (Rec. I, 35).

When the narrowing is completed, the end stops and the slides M and N on spindle K are returned to their initial positions by the turning of the spindles by hand in a direction opposite to that in which they are rotated in the narrowing operation. In other words, the "racking-out" is a hand operation (R. I, 35).

We have made particular reference to the narrowing operation and to the control of the end stops incidental to that operation for the reason that the attachment of the patent in suit, furnishing auxiliary stops for giving addi-

tional control to the travel of certain of the carrier bars, finds its utility in the cooperation of the auxiliary stops with the regular end stops on the machine.

The Schletter Attachment.

At page 1 of the specification, lines 24 to 37, of the patent in suit, is the following statement:

> "It is an object of my invention to provide an attachment for full-fashioned knitting machines whereby yarn-guides can be accurately controlled to lay a yarn over a distance less than the full length of a course being knitted, as for reinforcing or for so-called split-seam work wherein sections of fabric are connected by suture seams. For this purpose I preferably employ opposed stops with conjoint controlling means arranged to move them toward or from each incrementally, but any equivalent means or devices may be employed which will effect the purpose of the invention."

Whereas, in the ordinary operation of the knitting machine the yarn guides are controlled only by the end stops and lay the yarn over the full width of the fabric being knitted, that is, from selvage to selvage, the purpose of the attachment is to furnish accurate control for yarn guides *laying a yarn over a distance less than the full length of a course being knitted*; and this is done for "reinforcing" or "split-seam" work.

The terms "reinforcing" and "splicing" as employed in the patent, refer to the knitting in of an additional thread over a particular area of the main body of the fabric for ornamental purposes (Rec. I, 39).

"Split-seam" or "insert" work refers to the insertion in the body of the stocking of an area formed by a separate thread or fabric as distinguished from a "reinforced" area (Rec. I, 36, 37).

In addition to the patent in suit, reference may be made

to the perspective drawing, Plaintiff's Exhibit 15 (Rec. II, 366) and to the model, Plaintiff's Exhibit 11.

Detailed explanation of the mechanism and its operation will be found at pages 40 and 45, Volume I, of the Record. The essential parts are the reversely threaded spindle 11; the nuts or stops 9 mounted on the spindle and adapted to be moved toward and from each other by the rotation of the spindle in opposite directions; the ratchets 21 and 22 at the end of the spindle, adapted to turn the spindle in opposite directions, together with mechanical connections whereby these ratchets may be turned by power from the main cam shaft; the mechanism for determining which of the ratchets is to be operated so as to determine the direction of rotation of the spindle; and the pattern chains, one of which determines the time of operation of the spindle, and the other, the direction of rotation.

The means for operating the ratchets 21 and 22 is explained at R. I, 41. The pawl and ratchet mechanism at the end of the spindle 11 is out of operation so long as the slidable rod or shaft 42, shown at the bottom of Figure 1 of the patent, is in the position there shown, but when the shaft is moved slightly to the left by means of the spring 43, shown at the left-hand end of Fig. 1, the pawling mechanism for the ratchets 21 and 22 is set into operation.

The operation of the shaft 42 is controlled by the pattern chain 50, the buttons 55 on that chain having the function of releasing an arm or lever which normally holds the shaft 42 in its position, as shown in Fig. 1, and permitting the spring 43 to act to move that shaft 42 slightly to the left. This is explained at pages 41, 42, Volume 1, of the Record.

The selective mechanism is explained at pages 42, 43, Volume 1, Record. The pattern chain 70, shown at the right in Fig. 1, with its lugs 2, when they come to appropriate position in relation to lever 73, causes the tilting of the lever to move the cords 74 and 75 in such a manner as to throw either pawl 25 or pawl 26 into engagement with its

ratchet 21 or 22 and the direction of rotation of the spindle 11 will thereby be determined.

What the Attachment Does.

As stated at the commencement of the specification, the invention has more particular relation to an attachment for furnishing designs, or clocks, upon full-fashioned stockings. These designs may be inserts (split-seam work) or they may be formed by "reinforcing" or "splicing".

A specific example of the split-seam or insert work is illustrated in Fig. 10 of the patent, and the manner in which the auxiliary stops of the attachment are utilized in the knitting of this particular article is described at lines 21 to 45 of page 4 of the specifications. The other type of work, to wit, reinforcing or splicing, is illustrated in the patent (line 32, page 2) by reference to another patent to Schletter, No. 1,531,349, Plaintiff's Exhibit 39 (R. II, 393), illustrating a clock formed by the use of additional or reinforcing yarn.

The stockings, Plaintiff's Exhibits 21 and 22 (offered R. I, 49) illustrate the clocks formed by splicing or reinforcing, and the stocking, Plaintiff's Exhibit 17 (offered R. I, 46), is the split-seam or insert work of Fig. 10 of the patent.

The specific manner of use of the auxiliary stops of the attachment in connection with the end stops on the machine is explained in the record in connection with illustrative stockings and with drawings illustrating the control of the carrier bars in doing each type of work. The drawing, Plaintiff's Exhibit 16 (R. I, 367), illustrates the stockings shown in Fig. 10 of the patent in suit, and the manner in which the attachment is used in making that stocking is explained at R. I, 45, 46. The drawing, Plaintiff's Exhibit 18 (R. I, 368) and the stocking blank, Plaintiff's Exhibit 19 (offered R. I. 47), illustrate another form of insert work similar to that illustrated in Plaintiff's Exhibit 16. See pages 47, 48 R. I. In doing this work, certain of the carrier bars travel the full width of the fabric and are controlled

only by the end stops. Where the clock is inserted, the carrier bar laying the thread for the insert or clock is controlled entirely by the auxiliary stops, an abutment on the bar contacting at each end of the stroke with the inner face of one of the auxiliary stops. At the same time, other carrier bars for laying the thread on either side of the clock are controlled by the end stops at one end of their throw and by the auxiliary stops at the other end, an abutment on the carrier bar striking against the end stop at one end of its path and on the outer side of one of the auxiliary stops at the inner end of its path. During the knitting of the clock or insert portion, the position of the stops is adjusted automatically by the turning of the spindle 11 so as to form the junction along zig zag lines inclined to the wales and courses of the web, as illustrated, for example, in Fig. 10 of the patent.

The formation of the reinforced or spliced clocks, such as are referred to in Schletter's other patent, Exhibit 39 (R. II, 545), is explained at pages 72-74 R. I by the drawings marked Plaintiff's Exhibit 20 (R. II, 520). In this work, the thread forming the main body of the fabric is laid by yarn guides on carrier bars having the full stroke and controlled by the end stops. The thread for the ornamental reinforcement or clock is laid by guides on other carrier bars traveling less than the full width of the fabric and controlled by the auxiliary stops, these stops cooperating with abutments suitably placed on the carrier bars. Other examples of clock-work are shown in Plaintiff's Exhibit 23 (offered R. I, 75) and Plaintiff's Exhibit 24, (R. II, 521).

The insert work and the ornamental reinforced clock-work, thus described, are the two types of work specifically referred to in the patent.

The attachment can also be used for reinforcing work at the selvage. A particularly important type of such work is that shown in the "cradle foot" stocking, Plaintiff's Exhibit 29 (offered R. I, 51). This work is described at pages

51 to 52, R. I, in connection with the drawing, Plaintiff's Exhibit 28 (R. II, 372).

The foregoing explanation of the different general types of work which can be produced by the use of the attachment is of importance, as a large part of the value of the device resides in its availability for knitting stockings embodying any one of a large number of kinds of ornamental work which may from time to time meet the shifting demands of fashion.

COMMERCIAL HISTORY OF THE PATENTED ATTACHMENT.

Plaintiff purchased the patent in suit for $20,000. after a thorough investigation (R. I, 118) and placed the device on the market in August, 1927 (R. I, 77). Up to January 1, 1935, 6790 of the attachments had been sold by the plaintiff, of which 2768 were sold with knitting machines and 4052 were sold separately for attachment to machines already in service. (R. II, 385-387; R. I, 76-78.) The minimum sales price of the attachment was $350.00 (R. I, 119) and the business in the attachments, therefore, aggregated close to Two and One-half Million Dollars. These sales took place over a period which included several years of severe business depression.

All of the plaintiff's machines are provided with the attachment, and practically all of the older machines in operation in the industry at the time the attachment was brought out were later supplied with it (R. I, 118). Witnesses on both sides testified that the attachment now forms an essential feature of the full-fashioned knitting machine (R. I, 60, 127, 234). Hirsch, President and General Manager of the defendant, testified (R. I, 228):

> "As to the Carl Lieberknecht machines, at present we equip all of them with that attachment because the style demands that kind of construction of the stocking. For the present it would be hard to sell a full-fashioned machine without an attachment of that kind."

Plaintiff's competitors in the sale of full-fashioned knitting machines in this country are the American representatives of four German manufacturers. One of these has recognized the patent and taken a license, subject to the payment of substantial royalty—the Grosser license—Plaintiff's Exhibit 37 (R. I, 119). Another has applied for license (R. I, 119) and the only two others, the Hirsch Company, defendant in this suit, and the Hofmann Company, defendant in the prior suit, have declined to take licenses but have insisted upon using the attachments, and have joined in the effort to destroy the patent, (supra, p. 3).

The Claims in Suit.

As previously stated, the claims in suit are Claims 1, 3, 14 and 15. These claims are all directed to the same subject-matter. As the Court of Appeals in its opinion referred particularly to Claims 14 and 15 as the most detailed, we select one of these claims, Claim 15, for analysis as a basis for the discussion.

Claim 15—In a straight knitting machine,

(This refers to the machine shown and described, to wit, the conventional Cotton machine for making full-fashioned hosiery, termed in the patent, as well as in the art, a "full-fashioned knitting machine". This type of machine is characterized by its recipocating carrier bars controlled by end stops at either end of the machine, adjusted automatically when the blank is being "narrowed" or "fashioned".)

—a set of reciprocating yarn guide carrier bars, including bars having a stroke less than the width of the fabric being knitted,

(Some of the carrier bars are full-travel bars, controlled by the regular end stops, and others are short-travel bars, controlled, at least in part, by the auxiliary stops of the attachment.)

—a pair of stops for said guides,

(The auxiliary stops 9 of the attachment.)

—a reversely threaded spindle extending lengthwise of the machine, the respective stops being connected to the reversely threaded portion of the spindle for moving the stops simultaneously toward and from each other,

(This is the spindle 11 of the attachment, having the function stated, and suitable means for turning the spindle, as the ratchets 21 and 22, operated through connections from the main cam shaft—all as shown and described in the patent—is necessarily implied.)

—pattern controlled means for determining the time for such movement,

(The shaft rod 42 with its associated mechanism—seen best in Fig. 1 of the drawings, all under control of pattern chain 50 for putting the spindle actuating mechanism into and out of operation.)

—and correlated pattern controlled means for independently determining the direction of such movement.

(The lever 73 and its associated mechanisms clearly shown in Fig. 8 of the patent, all under control of the pattern chain 70, for selecting between ratchets 21 and 22 for operation.)

What this claim covers, therefore, is in the full-fashioned hosiery machine with its reciprocating carrier bars, the combination of full-travel bars controlled by the regular end stops, short-travel bars cooperating with the full-travel bars in making designs on hosiery, auxiliary stops for controlling the short-travel bars, the reversely threaded spindle for moving the auxiliary stops toward and from each other, and automatic means for moving the auxiliary stops

in either direction, including pattern controlled means for timing the operation of the spindle and pattern controlled means for selecting the direction of rotation of the spindle.

The patentee's contribution to the knitting machine art may be thus stated:—While he was not the first to provide mechanism for the making of ornamental inserts or split-seam work on hosiery, or mechanism for the production of ornamental reinforced designs, or mechanism for reinforcement at the selvages, he was the first to produce a single, compact, efficient attachment for the full-fashioned machine, readily added to an old machine or made a part of a new one, which permitted the machine to make, as and when the operator desired, any of said several types of ornamental or reinforcement work in all of the varied forms which these kinds of work may take.

The Court of Appeals in the decision here for review held the claims unpatentable for lack of patentable invention by coupling together two prior use devices known in the case as "Gotham" and "Nusbaum".

The Gotham Device.

This is shown in the drawing, R. II, 839; the photographs, R. II, 821-825, and the physical exhibit, DX R. I, offered R. I, 204. It was an attachment applied to the full-fashioned knitting machine for making the reinforced heels known as "Pointex" heels. For illustration, see R. II, 404. The blank for the stocking is shown in Fig. 8 of the Landenberger Patent (R. II, 522). The fabric of the blank was provided with reinforcement at the heel tabs, such reinforcement extending from the selvage on each side and terminating inwardly on a diagonal line.

While in this attachment there was a reversely-threaded spindle, and each threaded portion of the spindle carried a nut to serve as a stop for one of the carrier bars, these stops were neither adapted nor arranged to serve as auxiliary stops for the control of carriers for making ornamental designs away from the selvage, such as the "clocks" or

split-seam inserts of the patent in suit. Referring to the drawing, R. II, 839, the stop 8 at the left of the picture controlled the inward movement (to the right) of one carrier bar, and the stop 8 at the right of the picture controlled the inward movement (to the left) of another carrier bar, but there was no common control by these nuts of one or more carrier bars provided with abutments shuttling back and forth between the stops. Furthermore, there was no mechanism for moving the stops automatically in both directions, and of course no selective mechanism for determining the direction of rotation of the spindle. The spindle was rotated in one direction only for adjusting the position of the stops while doing their work, and after the work was finished, the threaded spindle was turned in the reverse direction by hand (an operation known as racking-out) to re-set the stops in preparation for a similar operation on the next blank.

This Gotham attachment was used, and could only be used, for the single purpose of making Pointex heels, that is to say, it was adapted and used solely for making a single form of straight-line selvage reinforcement. Attachments of this character were furnished to the Gotham Mill at Dover, N. J., from Germany at least as early as 1912, and similar attachments were furnished to Julius Kayser, of New York, at least as early as 1919. The device has been well-known for 25 years, and the only thing it was ever used for was to make the Pointex heel (R. I, 275, 276). The devices are no longer in use.

The Nusbaum Machine.

This machine is shown in the photographs, Defendant's Exhibit Y-1 (R. II, 830) and illustrated in the drawing, Defendant's Exhibit B-2 (R. II, 840).

It is a flat knitting machine for making knitted underwear and such articles as bathing suits. As shown in the exhibits referred to, this type of machine has at each end a single spindle, threaded in one direction only, employed in

moving simultaneously the fashioning points and the end stops for controlling the movement of the reciprocating carrier bars in fashioning. These spindles can be operated in either direction, so that the garment can be shaped either by widening or narrowing the blank. Desiring to make bathing suits with a limited class of ornamental designs, the Nusbaum people utilized the regular fashioning screws or spindles at opposite ends of the machine and the regular end stops to control the travel of a bar laying in the thread for the designs, and they added fixed stops at each end of the machine to take the place of the regular end stops and control the travel of the carrier bar laying the thread for the body of the garment. They thus sacrificed the fashioning function of the machine and could only make garments with straight edges.

Opinion of the Court of Appeals (R. II, p. 769.)

The Court held that while the Gotham device did not anticipate the device of the patent in suit, it left but a slim margin for invention; that the Nusbaum device was "substantially the same thing as the defendant's attachment", and that there was no invention in the bare conception of combining Gotham and Nusbaum. The Court conceded that as between Nusbaum and the combination of the patent in suit "it is indeed quite possible that there were in fact obstacles enough to call for substantial inventive capacity"; but said that "if so, Schletter did not show how they were to be overcome".

Summary of Argument.

I. *The Gotham device was not an anticipation of the patent in suit.*

It did not meet the claims in terms or in substance.

II. *As compared with the Gotham device, the attachment of the patent in suit represents a real invention.*

(a) It involved a new combination with different functioning of the parts and a new result.

(b) Substantial inventive capacity was required to conceive the mechanism involved.

(c) The Court of Appeals was in error in its conclusion that the invention of the patent in suit must rest upon the bare conception.

III. *The Nusbaum machine was not an anticipation of the claims in suit and it did not approach the Schletter invention.*

The Court of Appeals misunderstood the Nusbaum device.

IV. *The Court of Appeals was in error in combining, or attempting to combine, "Gotham" and "Nusbaum".*

The two devices were unrelated; they were mutually antagonistic and could not be combined; the aggregate work of the two devices fell far short of the work for which the attachment of the patent in suit is adapted.

V. *The attachment of the patent in suit has had unusual commercial success and filled a long-felt want.*

The Court of Appeals was in error in its treatment of this evidence of invention.

VI. *Discussion of sundry other defenses not considered by the Court of Appeals.*

ARGUMENT.

I. *The Gotham device was not an anticipation of the patent in suit.*

That Gotham was not an anticipation, was recognized by the Court of Appeals (R. II, 771). It had a reversely threaded spindle and two auxiliary stops, but these stops did not act as a "pair" in controlling the carrier bars (see patent specification, page 2, lines 124-128). There was no mechanism for moving the stops automatically in both directions, no timing means, such as is required by the claims, and no selective mechanism for determining the direction of rotation of the spindle. Consequently, it was wholly incapable of doing the type of work accomplished by the device of the patent in suit.

As held by numerous decisions of this Court, it is not sufficient to constitute an anticipation that the device relied upon might, by modification, be made to accomplish the function performed by the patent in question, if it were not designed by its maker, nor adapted, nor actually used, for the performance of such functions. Topliff vs. Topliff, 145 U. S. 156.

II. *As compared with the Gotham device, the attachment of the patent in suit represents a real invention.*

(a) It involved a new combination, with different functioning of the parts and new result.

Of Gotham, the Court of Appeals said:

"We shall call this machine the 'Gotham'; it would not have been available for Schletter's purpose as it stood, and it did not therefore literally anticipate his invention. But it certainly pressed very closely upon it, and left at best a slim margin for invention; nothing indeed but the train automatically to reverse the rotation of the screw shaft by the pattern belt."

But in dealing with a new invention, it is clear, we submit, that the question of patentable invention turns not merely upon the extent and nature of the mechanical changes, but rather upon the question of novelty of function and result. The addition of mechanism for accomplishing the purpose of the new combination must be preceded by the conception of the purpose in view and the recognition of the availability of the old device with the addition of the necessary mechanism for the accomplishment of the new purpose and added functions. Nat. Cash Register Co. vs. Boston Cash Indicator Co., 156 U. S., 502 (514); Hobbs vs. Beach, 180 U. S., 383 (392); White & Co. vs. Converse & Son Co., 20 Fed. (2nd), 311.

The selvage reinforcement work accomplished by this Gotham device and the operation and functioning of the auxiliary stops in that device have been described above, p. 17.

Comparison with the drawings, Plaintiff's Exhibits 16, 18, 20, 24, 25 and 28 (R. I, 367-372), showing how the auxiliary stops of the attachment of the patent in suit are employed in doing the various kinds of design work, will show very clearly the difference in function and mode of operation. For example, in Exhibit 16 the yarn carrier which lays the thread for the inserted design is on the uppermost carrier bar, and the movement of this bar is controlled at either end by the two auxiliary stops, these stops thus serving as "opposed" stops, the abutment on the carrier bar contacting with the inner faces of the two stops. At the same time these auxiliary stops are cooperating with the end stops to control the carrier bars for the carriers which lay the body yarn at either side of the inserted work. As the design is in the narrowed portion of the blank, the end stops, while cooperating with the auxiliary stops in the manner stated, are themselves being moved inwardly step by step in the narrowing operation. Also it will be noted that while the auxiliary stops are performing their double functions, as stated, they are caused to move automatically in both directions; whereas, in the Gotham attach-

ment, they moved in performing their work in one direction only.

Thus it will be seen that the Pointex heel attachment, as employed at Gotham and elsewhere, was a single purpose device. It was adapted and used solely for making a single form of selvage reinforcement at a single part of the stocking, the heel. The auxiliary stops were not adapted to be used as "opposed stops" for the making of ornamental work (splicing or shadow clock designs or inserts, or split-seam designs) away from the selvage (R. II, 395, 396, et seq.). Such work required the operation of the reversely threaded spindle automatically in both directions, with the necessary selective and timing mechanism with suitable pattern devices. It meant giving the auxiliary stops a function which they did not possess in the pointed heel attachment, to wit, the control of carrier bars between the inner faces of the stops and the placing on the carrier bars thus to be controlled of the necessary abutment or abutments required by that different use of the said stops. Instead of a combination of end stops and auxiliary stops adapted to the sole purpose of making a one-way selvage reinforcement of a set form, there was a new combination of end stops, auxiliary stops and the necessary mechanism for automatic operation of the auxiliary stops in both directions, the new combination being adapted not only for selvage reinforcement of any desired form, but more particularly for split-seam work, fancy insert work away from the selvage, and spliced designs (such as shadow clock work), providing for the full-fashioned hosiery machine, for the first time in the history of the art, a single, efficient attachment for accomplishing a wide variety of work never before accomplished by any single device.

We submit that the District Court was right in its conclusion on this point (R. II, 750) when it said:

> "By adding the automatic reverse, with the necessary operating, selecting and timing mechanisms, Schletter produced a new combination, giving to the

auxiliary stops functions which they did not possess in the old pointed heel device, producing an entirely new result; turning a device adapted for a single purpose into a device of general utility, adapted for a whole field of new uses, which those familiar with the old attachment had never dreamed of. Such steps as this show invention. Diamond Rubber Co. vs. Consolidated Co., 220 U. S., 428; Temco vs. Apco, 275 U. S., 319; Bragg-Kliesrath Corp. vs. Farrell, 36 Fed. (2nd) 845; Thropp & Sons Co. v. DeLaski, 226 Fed., 941, 947."

(b) Even if the question of invention turned solely upon a consideration of the mechanical changes involved (which, we submit, under the decisions of this Court, is not the law) the record here confirms the presence of invention.

Schletter had to do much more than supply an additional pawl and ratchet and the necessary train for operating them from the main cam shaft. He had also to supply a suitable mechanism to determine which of the pawls on the reversely threaded spindle should be actuated at any given time and thereby determine the direction of rotation.

Not only was it necessary that these two mechanisms be properly coordinated and timed with respect to each other as by means of shaft 42, but they must also be prevented from interfering with other operations of the knitting machine. In the Gotham attachment, the auxiliary stops were operated only in knitting that portion of the heel where there was no operation of the regular narrowing mechanism. The primary uses of the attachment of the patent in suit either on the legger or on the footer require the employment of the auxiliary stops in knitting those parts of the stocking where, at the same time, narrowing is taking place. The movement of the narrowing points and the movement of the threaded spindle for changing the position of the auxiliary stops can not be made at the same moment, and hence mechanism is provided for preventing this.

This mechanism is that described at lines 46 to 62 of page 4 of the specification. Of importance also is the fact that in the Gotham attachment, the auxiliary stops did not act as "opposed" stops for controlling the travel of a single carrier bar, and therefore the device of the patent in suit required a different location of the abutments on the carrier bars from that involved in the Gotham device.

The full-fashioned hosiery machine to which the attachment was to be applied is a complex organism, involving a large number of complicated mechanical operations; the new attachment had to be operated automatically through the medium of a device to be added to the main cam shaft which was already filled with cams and other devices for operating the regular motions of the machines; and the new device had to be synchronized with other operations, as the auxiliary stops of the attachment must be worked in conjunction with other moving parts, such as the regular end stops, the stitch regulating mechanism and the rocking motion, and must be prevented from interfering with other movements.

That the problems were real is shown by the evidence (R. I, 310-1; 272-3). The location of the spindle in a certain position relative to the carrier rods necessitated the building of the controlling mechanism into an inside section already provided with all the parts necessary to operate the knitting machine, and this prevented the employment in Schletter's attachment of control mechanism for the spindle, which otherwise might have been available.

The conclusion that the conversion of Gotham into the attachment of the patent in suit was, mechanically considered, a mere matter for the expected skill of the mechanic finds no basis in the evidence in the case.

In the case of a complicated piece of mechanism like the full-fashioned knitting machine, the observation of this Court in Diamond Rubber Co. v. Consolidated Rubber Co., 220 U. S., 428 (435), is particularly applicable:

"Many things, and the Patent Law abounds in il-

> lustrations, seem obvious after they have been done, and, 'in the light of the accomplished result' it is often a matter of wonder how they so long 'eluded the search of the discoverer and set at defiance the speculations of inventive genius', * * * Knowledge after the event is always easy, and problems once solved p[illegible]sent no difficulties, indeed, may be represented as never having had any, * * *''

(c) The inherent difficulties of the problem, requiring substantial inventive capacity to overcome, were recognized by the Court of Appeals. Speaking of the technical difficulties of executing Schletter's conception, the Court said (R. II, 772):

> "It is indeed quite possible that there were in fact obstacles enough to call for substantial inventive capacity; but if so, Schletter did not show how they were to be noted in a moment, he said nothing at all about how his attachment was to be put on."

This led to the conclusion that "the patent can only stand upon the bare conception." (R. II, 773.)

In this, the Court was surely in error. The drawings of the patent clearly show the attachment *in place* upon the full-fashioned knitting machine. As clearly shown in Fig. 1, the reversely threaded spindle is mounted on an inner section of the machine, just inside the end section. All this is specifically explained in the specification, and at page 3, line 19, it is expressly pointed out that the brackets 12 carrying the reversely threaded spindle are to be located "intermediate the length of the machine", as clearly shown. A comparison of Fig. 1 of the drawing with the photograph, Plaintiff's Exhibit 54 (R. II, p. 407) will show the identity of the location of the stops 9-9 as shown in the photograph with that shown in Fig. 1 of the patent drawings. The screws on the spindles, shown at the righthand end of the photograph, are the regular fashioning screws in the full-

fashioned machine which have been omitted in the patent drawings for the sake of simplicity. The patentee devised and disclosed in his patent a complete attachment, including the operating and selective mechanism, in a form adapted for application by the mechanic to the full-fashioned machine at the location and in the manner shown and described. That was all that he was required to do. The plaintiff, in his commercial form of attachment, and the defendant have simply substituted mechanical equivalents for the specific form of mechanism disclosed.

We submit that the Court was clearly in error in its conclusion that the invention must rest "upon the bare conception", and in thus finding lack of invention (contrary to the view of the three other courts who have passed upon the question) notwithstanding its own recognition of the likelihood that "substantial inventive capacity" was required.

The Court was equally in error, we submit, in brushing aside, as a mere matter of mechanics, the provision of mechanism for preventing the movement of the reversely-threaded spindle during the movement of the narrowing points in fashioning. The Court said of this problem that "the solution was one which could scarcely have foiled a competent mechanic who might learn of the need by experience". There is not a syllable of evidence in the record to support this conclusion, and in this respect, we submit that the Court placed upon the plaintiff a burden, which is in law upon the defendant. It is true that the mechanism devised and disclosed by the patentee for accomplishing this purpose is not recited in the claims here in suit; but nevertheless, we submit that the existence of this problem and the necessity for its solution must be taken into account as one of the material facts bearing upon the question whether the combination of the claims in suit involved creative imagination or merely the routine work of a skilled mechanic.

III. *The Nusbaum machine was not an anticipation of the claims in suit and it did not approach the Schletter invention.*

This machine, as altered by the Nusbaum people obviously lacks the vary essence of the Schletter invention, to wit, the furnishing of an attachment to be added to or embodied in the regular full-fashioned machine, which attachment provides auxiliary stops, automatically controlled, additional to and cooperating with the regular end stops on the machine, so that while the machine is functioning to make full-fashioned hosiery, involving, of course, the use of the regular fashioning screws controlling the end stops, short travel bars can also be automatically controlled to lay in the yarn necessary in making the desired ornamental designs. To put the matter succinctly, Nusbaum was able to make a single type of ornamental design, but only by sacrificing the fashioning of his garment; whereas, Schletter made an attachment for making fancy designs of many types (as well as numerous other things) without interfering in any way with the devices essential to the machine for making full-fashioned hosiery.

The Nusbaum machine is not an anticipation of the claims of the patent in suit, not only by reason of its lack of the reversely threaded spindle, but because, as altered, the machine was no longer a full-fashioned machine, and it did not have auxiliary stops, automatically controlled, in combination, and acting in cooperation, with the regular automatically controlled end stops of the full-fashioned machine,—all as required by each of the claims of the patent in suit (supra pp. 15, 16).

The Court of Appeals in referring to the Nusbaum device referred to it as an attachment, and said that:—"Nusbaum made over an old 'full-fashioning' machine, using the existing nuts as variable abutments *for stops on* the bars which carried the secondary thread carriers, and supplying a new thread carrier and bar for the main thread." The result, it is said, was substantially the same thing as the defendant's attachment.

It is evident from this that the Court misunderstood the Nusbaum device. The spindles and nuts employed to control the reciprocation of the "secondary" thread carriers were the spindles at opposite ends of the machine with the regular end stops thereon, and they were used without change of location as end stops for the "secondary" thread carriers. They were not, as understood by the Court, used "as variable abutments *for stops on* the bars which carried the secondary thread carriers" in seeming analogy to the variable stops of the attachment of the patent in suit—*they were end stops separated by the entire length of the knitting machine, and they functioned as end stops and nothing more.**

The difference is material. Acting only as end stops—that is to say, stops against which the ends of the controlled carrier bars abutted—these stops were incapable of performing the functions with respect to which the attachment of the patent in suit has found it real utility. The work shown in Fig. 10 of the patent in suit could not be done because it is insert work. Not even reinforced clock-work on hosiery could be made for any practical purpose, as this normally required two clocks on the blank—one for each side of the stocking. Thus the clock-work shown in Schletter Patent No. 1,531,349 (R. II, 393) and specifically referred to in the patent in suit (Spec. p. 2, I 32) as illustrative of the work in contemplation, could not be made on the Nusbaum device. We are not here speaking of the lack of fashioning, but of the fact that *end-stop control* of the secondary carriers—the only thing attempted or taught by Nusbaum—would be useful only for a lone reinforced design between the selvages. Thus not one of the types of design shown on

* The Court may have been confused by the drawing, Defendant's Exhibit B-2 (R. II, 840). In that drawing the spindles A and B appear to be close to each other in seeming analogy to the threaded portions of the reversely threaded spindle in the patent in suit. It will be noted, however, that the drawing shows breaks in the longitudinal frame member of the machine and in the carrier bars. If the drawing were complete, it would be apparent that the threaded spindles A and B are separated by the entire length of the knitting machine.

pages 367 to 372, R. II, could be made by Nusbaum's end-stop control of the auxiliary carrier bars, quite apart from the fact that fashioning at the margins is also required.

In referring to the Nusbaum machine, the Court of Appeals referred to it as "a knitting machine for making sweaters which was not 'full-fashioning' because the web for a sweater is not narrowed from top to bottom". Before the machine was altered by Nusbaum, it was a "full-fashioning" machine, and it was used for making fashioned garments. The effect of utilizing the Nusbaum fashioning screws for design purposes was to make it impossible to fashion garments and at the same time furnish them with designs, with the result that in order to get his designs, Nusbaum had to make an inferior garment, which could only be sold at reduced prices. (R. II, 810.) This furnishes a factual answer to a contention made by the defendant to the effect that in order to make designs in a fashioned garment, it was obvious to the knitter that all he had to do was to duplicate the fashioning mechanism for the purpose of making the designs. This certainly was not something which was obvious to Nusbaum.

IV. *The Court of Appeals was in error in combining, or attempting to combine, "Gotham" and "Nusbaum" to defeat the claims of the patent in suit.*

The work performed by the Gotham attachment and that done on the altered Nusbaum machine had no real relation. The Gotham attachment was used for reinforcing the heels of stockings—remote, indeed, from making fancy colored designs on bathing suits.

The means for controlling the carriers on the two machines for laying in the extra yarn were quite distinct. In Nusbaum the spindles and nuts employed to control the reciprocation of the carrier laying in the extra yarn were the spindles at opposite ends of the machine with the regular end stops thereon, and they were used without change of location as end stops and nothing more;

that is to say, stops against which the ends of the controlled carrier bar abutted. There were not, as in the attachment of the patent in suit, additional stops brought together and mounted on a reversely threaded spindle, located intermediate the ends of the machine and adapted to control auxiliary bars provided with suitable abutments working back and forth between the stops.

As Nusbaum employed his fashioning screws for controlling his design yarn carrier bar, his whole scheme was foreign to the device of the patent in suit, which provides an attachment for furnishing designs to hosiery without interfering with the regular operations of the full-fashioned hosiery machine.

As to the proposed combination of Gotham and Nusbaum, the situation is even worse. In Gotham, the stops or nuts on the reversely threaded spindle were neither used nor adapted to control the same carrier bar, as required for Schletter's purposes. The stops or nuts were specifically arranged to act upon different carriers, and nothing beyond this was in contemplation. The Court's evident misunderstanding of the Nusbaum device led to the belief that Nusbaum supplied the idea missing in Gotham. But clearly, this is not so. Nusbaum's adjustable stops were merely the end stops and carried no suggestion that auxiliary stops, such as involved in Gotham, could, by the making of such changes in the stops themselves as would adapt them to the new purpose, and by the proper location of abutments on the carrier bars and the introduction at the proper place in the machine of the additional pawling mechanism and selecting mechanism, be converted into the universal attachment covered by the Schletter patent in suit.

The devices could not be combined, as Nusbaum's end-stop control inhibited the use of any similar scheme for Schletter's purpose. And, as we have pointed out above, Gotham and Nusbaum together could do practically none of the types of work for which the patented attachment has proved of value in the industry.

Nusbaum gave no help in the solution of the mechanical problem involved in devising timing and selective mechanism suitable for the purposes of the patent in suit. The Nusbaum controlling mechanism (see Defendant's Exhibit Y-1, R. II, 830) involved the use of two independently operated pawling devices,—there being two pawls, working independently and in different directions. While this type of controlling mechanism could be used by Nusbaum for the operation of his spindles at the ends of the machine, such a control could not be employed by Schletter for his reversely threaded spindle, as the latter had to be located at an inside section, at a part of the machine where there was no room for the passage of such connections as were employed by Nusbaum (R. I, 272). Neither the plaintiff patentee, nor the defendant, has attempted to employ the independent pawling means of Nusbaum.

V. *The commercial history of the attachment of the patent in suit negatives the plea of lack of invention.*

Plaintiff put the attachment on the market in 1927 (R. I, 77). The pointed-heel attachment had been in the art at least 15 years and was a thoroughly well-known device for its particular use (R. II, 786). Plaintiff itself was familiar with the old attachment at the time it purchased Schletter's device for the substantial sum of $20,000 (R. I, p. 275). As above stated (p. 14), the attachment achieved an important and striking success, and promptly became an indispensable feature of the full-fashioned knitting machine. That there had been a need for such a device, is sufficiently shown by its immediate adoption. But in addition to this, the Record shows affirmatively that such need had existed for years, notwithstanding efforts in the industry to fill it.

The Gotham attachment was in use as early as 1912, and, as the record shows, was a well-known attachment for

its particular purpose. If the modification of this attachment to turn it into the universal device of the Schletter Patent was an obvious matter, there is no reason why the industry should have awaited such a device for the fifteen-year period intervening between the introduction of the Gotham attachment and the placing of the Schletter device upon the market in 1927. As shown by the Record, numerous applications were filed in the intervening period showing that the industry was seeking to find a suitable attachment doing design work of the character of that accomplished by the Schletter attachment. See the Gee device, R. II, 502, application for which was filed March 23, 1911; the Cecka devices, R. II, 469, 474a, 412, applications filed respectively July 22, 1914; January 14, 1915, and October 16, 1915; the Muller device, R. II, 542, and the Oesterreich device, R. II, 548, applications filed in 1923; the Lack device in the Hofmann Record, application filed in February, 1924; the Werfelman device, also in the Hofmann Record, application filed in January, 1925.

The Cecka patents mentioned are of particular interest. These patents, Nos. 1,180,568 and 1,217,411, (Rec., pp. 619, 624) were taken out by Schubert and Salzer on applications filed as long ago as 1914. Schubert and Salzer is a leading manufacturer of knitting machinery in Germany and is the principal of Hofmann, the defendant in the Hofmann suit. One of these patents, No. 1,180,568, was directed specifically to an attachment for doing the very type of work for which the Schletter attachment was primarily designed, to wit, the making of ornamental designs remote from the selvages, such as the shadow clocks. The other patent, No. 1,217,411, was specifically directed to the making of reinforcements at the selvage in which the inner margins of the reinforced portions would lie along lines at an angle to the wales and courses of the fabric diagonally in both directions. This work is another one of the important types of work for which the Schletter device is adapted.

The patents show not only that the principals of the defendant in the Hofmann suit (aiding in the defense of this suit) were attempting to supply the full-fashioned hosiery machine with attachments for doing Schletter's work, but they answer in the most direct manner defendant's claim that the Schletter device was an obvious non-inventive development of the old pointed heel attachment. That old attachment originated in Germany, and as has been pointed out, was a thoroughly well-known device for its purpose, yet we find Schubert and Salzer, instead of making the development which the defendant now says was obvious, producing crude and inferior devices, each of which could do only a part of the work which can be accomplished so satisfactorily by the Schletter device, and both of which together fall short of accomplishing all of Schletter's work. We also find that after Schletter successfully solved the problem on which the German manufacturers were working, and the latter were then forced by the mills to furnish attachments for doing the ornamental work successfully, the devices furnished are not the Cecka devices which represent the best that Schubert and Salzer could do, but the Schletter device which actually solved the problem.

Referring to the marked commercial success of the patented attachment, the Court of Appeals said (R. II, p. 773):

> "Nor are we told by what means the attachment has achieved its success; for all that appears it may have come into strong hands, especially able to exploit it."

It did come into strong hands in the sense that the plaintiff is a leading manufacturer of full-fashioned knitting machines. But the Record affirmatively shows that the success of the attachment was due to the utility of the device itself.

Struve, General Manager of the Apex Hosiery Company, operating 400 full-fashioned knitting machines with a production of 4,000 dozen pairs of stockings a day, testified that the attachment of the patent in suit is utilized on all of the Company's machines (R. I, 71). He testified to the various uses to which the attachment has been put by his Company, and stated that the device is all-important as an addition to the regular full-fashioned knitting machine (R. I, 72), "because it is very simple, accurate, easy to set, easy to operate, and it has great possibilities as far as design and reinforcements are concerned" (R. I, 72). Hemmerich, Superintendent of the Berkshire Knitting Mills at Reading, Pennsylvania, the largest full-fashioned hosiery mill in the world, manufacturing daily some 12,000 dozen stockings testified, (R. I, 60) that the attachment of the patent in suit is used on 1023 out of a total of 1180 of the Berkshire machines; that the device has proved highly satisfactory; that he regards it as all-important; and that a manufacturer would not want to buy a machine without it (R. I, 60). Goetsch, Superintendent of the Quaker Hosiery Company, of Philadelphia, operating 210 full-fashioned knitting machines and turning out about 2,000 dozen pairs of stockings a day, testified that the attachment is used on all but about 19 of his machines; that he has found the attachment successful and satisfactory; and that today he regards the attachment as indispensable (R. I, 127). The same evidence comes from defendant's president and general manager, Hirsch (supra p. 14).

Defendant has argued that the demand for the attachment was inspired by the appearance upon the market of a particular form of stocking known as the "cradle-foot" or "cradle sole". As a matter of fact, the development of the "cradle sole" did not inspire or lead to the bringing out of plaintiff's attachment; it was the bringing out of the attachment which led to the "cradle sole". (R. I, 60; 129; 224.)

The capital error of the Court of Appeals, in its consideration of the evidence of commercial success, was in limiting its inquiry as to previous demand to the five-year period antedating the Nusbaum device. For the reasons pointed out above, it is clear that the Nusbaum device could have given no aid in the solution of Schletter's problem. The Court of Appeals misunderstood the Nusbaum device.

While commercial success and universal adoption cannot take the place of invention, they are, under the decisions of this Court, cogent evidence of its presence, particularly where, as here, the device has filled a long-felt want. Paramount Publix Corp. vs. American Tri-Ergon Corporation, 294 U. S. 464, 474 and cases cited.

We respectfully submit that the Court of Appeals of the Second Circuit was in error in striking down the patent in suit for lack of invention and that the District Court in the instant case and the Courts in the Third Circuit were correct in overruling the defense.

Other Defenses.

On the assumption that respondent will seek to sustain the decree of invalidity of the patent in suit on one or more of the grounds presented to but not passed on by the Court of Appeals, said grounds will be discussed briefly.

A. Alleged Insufficiency of Disclosure.

The sole criticism of the defendant has to do with the lever connection between the pawl and ratchet for moving pattern chain 70 and the main cam shaft.

Referring to the perspective drawing, Plaintiff's Exhibit 15 (R. II, 366), no criticism is or can be directed to the patent drawings so far as concerns the showing of the

mechanism for operating the ratchets 21 and 22 for turning the spindle in opposite directions; the timing means for bringing the foregoing mechanism into operation, to wit, the movable shaft 42, the mechanism for shifting it under the control of the pattern chain 50, said pattern chain 50 being operated by pawl 53 with a suitable lever connection for actuating said pawl 53 from the main cam shaft; and the selective means for determining which of the ratchets 21 and 22 shall be rotated at a given time, said mechanism including the lever 73, with cords 74 and 75 connected to the pawls 25 and 26 respectively and moving one pawl into actuating position and the other pawl out of actuating position, said lever 73 being moved by the pattern chain 70 with its buttons 72. The alleged obscurity has to do solely with respect to the showing of the lever connection by which the pawl 71 is actuated from the main cam shaft 5, that is to say, the connection between the lever arm marked B in the perspective drawing (clearly shown in Fig. 1 of the patent drawings) and the pawl 71 at the back of the machine. This connection between lever arm B and pawl 71 is not bodily shown in the patent drawings, and evidence was received at the trial on the issue whether or not the form of the missing part would be understood by those skilled in the art and readily supplied. The evidence on the part of defendant consisted of the expression of an opinion by a professional expert, to the effect that he could not determine from the patent drawing how the pawling mechanism for the chain 70 was intended to work, and further that he did not think it would operate any way (R. I, 144, and see cross-examination 213-220 and Judge Lindley's comment, R. II, 751). On behalf of the plaintiff, three competent witnesses testified to the effect that the patent drawings and the specification could be readily understood by those skilled in the art; that anyone familiar with drawings would know the exact form of the missing connection; that the model, Plaintiff's Exhibit 11,

and drawing, Plaintiff's Exhibit 15, (R. II, 366) correctly represent what the patent clearly discloses, (Meyer, R. I, 44, 45; 79-83; 297, 298; 321, 322; Ischinger, R. I, 330, 331; Hamel, R. I, 334, 335). The witnesses also testified that a full-sized operative device was built in the form shown by the model, Plaintiff's Exhibit 11, and that said device operated successfully, and was capable of so operating indefinitely. (Meyer, R. I, 297, 298; Hamel, R. I, 335; Greiss, R. I, 304-307). Photographs of the test device are in evidence as Plaintiff's Exhibit 54 (R. II, 407).

This issue of fact was found in favor of the plaintiff by the District Court (Findings 10 and 11, R. II, 755; Opinion R. II, 751). The same conclusion had been reached by both Courts in the Hofmann suit, see Opinion of Judge Avis (Appendix A), and of the Court of Appeals (Appendix B), affirming the decree on the Opinion of the Court below.

The burden of proof on the defense of insufficiency of description and on the defense of inoperativeness is heavily upon the defendant. Webster Loom Co. vs. Higgins, 105 U. S., 580-586.

As the point comes before this Court, it presents a simple question of fact upon which there has been no conflict in the Courts below, and upon which all three Tribunals who have examined the point have concurred in finding for the plaintiff. Under such circumstances as this, it is not the practice of this Court to disturb the Fact Findings of the Trial Court.

Defendant's attempt to treat the lever connection alleged to be obscure as "what is claimed as the invention", or, as "the mechanism which constitutes the asserted and claimed invention", has no basis. The claims of the patent are not based in any respect upon any alleged novelty in the particular connecting part which is alleged to be obscure, nor any particular form selected for this part, but upon plaintiff-patentee's

entire new combination. Of course, to make the combination operative, power must be transmitted from the cam shaft to the pawl and ratchet for moving the pattern chain 70, but to refer to this connection as "what is claimed as the invention" or "the mechanism which constitutes the asserted and claimed invention", is obviously incorrect.

B. Alleged Inoperability of the Device of the Patent in Suit.

(1) *Failure of the patent in suit to show narrowing cams.*

It is necessary that rotation of the reversely threaded spindle be prevented during the narrowing operation, and that means be provided for preventing the cam rollers falling off the cams when the cam shaft is shifted in the narrowing operation. The evidence shows that wherever operative cams are placed upon the cam shaft of the full-fashioned knitting machine, they must be accompanied by narrowing cams, that is to say, idler cams or rollers, upon which such parts as are not intended to be actuated during the narrowing operation may rest when the main cam shaft is shifted in narrowing. (Meyer, R. I, 29, 30; 112, 113; Hamel, R. I, 300, 301; Greiss, R. I, 304-307).

Such narrowing cams are shown in the model, Plaintiff's Exhibit 11, where they are utilized in the usual manner (R. I, 113).

The witnesses referred to above also testified that neither rotation of the reversely threaded spindle during narrowing, nor the dropping of the cam rollers from their cams, would occur when the usual narrowing cams, required in all full-fashioned knitting machines, are supplied.

The failure of the drawings of the patent in suit to show the usual narrowing cams is of no significance, as the evidence above referred to clearly shows that anyone

familiar with knitting machinery would know that the narrowing cams were to be used, as they are a part of every knitting machine.

It has always been the law that a patentee in describing his invention need not show and describe well known things which those skilled in the art would recognize as intended to be employed in the utilization of the invention. As put by this Court (Carnegie Steel Co. vs. Cambria Iron Co., 185 U. S. 403, 437):

> "He may assume that what was already known in the art of manufacuring steel was known to them, and, as observed by Mr. Justice Bradley in Webster Loom Co. v. Higgins, 105 U. S., 580, 586, 'he may begin at the point where his invention begins, and describe what he has made that is new, and what it replaces of the old. That which is common and well-known is as if it were written out in the patent and delineated in the drawings.' "

(2) *Omission of mechanism for lifting or taking stops 7 out of operation.*

As to defendant's attack upon the patent on the ground that no mechanism is shown in the patent for lifting or taking out of operation the stops 7, which is in line with the argument based on absence of narrowing cams, the patent in suit points out (Spec. p. 2, lines 92, et seq.), that the stops employed are those of the well-known split-sole device and the evidence shows that well-known means were always provided in connection with said stops, both for preventing them from rocking or tilting, and for lifting them entirely out of the way when the stops were not employed. (See Meyer, R. I, 37-39; 86, 87, and the illustration of the split-sole attachment on page 54 of Plaintiff's Exhibit 6. See also Goetsch, R. I, 128.)

This point of defense was not raised in the Hofmann litigation, but here again is a point involving an issue of

fact found in favor of the plaintiff by the Trial Court (Finding 10, R. II, 755; Opinion R. II, 751, 752) and as to which there is no conflict of opinion below, and we submit that the finding of the District Court was without error.

C. Invalidity for Alleged Anticipation By One or More of Sundry Pleaded Prior Patents.

Defendant's Answer, with its amendments, cited over fifty patents and publications as anticipations. At the trial defendant's expert referred to twenty-five of the cited patents. In the Court of Appeals, defendant narrowed the list of alleged anticipations to nine, all of which, except three, (issued from sixty-five to one hundred years ago) had been cited and disposed of in the Hofmann suit.

For the convenience of the Court, these nine references are explained briefly in an appendix to this brief—Appendix C.

Patents have been cited which have to do with the control of narrowing points; others have to do with the control of full travel bars only; others, while showing devices for controlling short travel bars, are single-purpose devices, not involving Schletter's purpose or his mechanism; others show specially designed machines, and do not relate to attachments for full-fashioned hosiery machines; and still others relate to independent needle machines, not involving the control of carrier bars. Not one of the references meets the terms of the claims in suit, and not one meets Schletter's invention in substance. Further, not one of the many references represents the device which the defendant is now utilizing in infringement of the plaintiff's patent.

The District Court found that none of the patents or publications relied upon constitutes an anticipation (R. II, 755). The District Court and the Court of Appeals

for the Third Circuit reached the same conclusion in the Hofmann suit.

It has been repeatedly held in the decisions of this Court that an infringer may not create an anticipation by piecing together features claimed to be found in a number of disconnected prior patents in the same or other arts.

Bates v. Coe, 98 U. S., 31 (48);
Imhaeuser v. Buerk, 101 U. S., 647 (660).

We submit that there was no error in the decision of the District Court upon this point.

D. Invalidity of the Patent in Suit For Alleged Want of Commercial Utility.

By this defense, defendant raised the point that in the patent in suit the patentee showed and described a particular form of auxiliary stop particularly adapted to produce a type of split-seam claimed by the defendant not to be commercially useful.

The stops 7 are a well-known type of split-seam stop provided with an undercut portion, as clearly shown in Fig. 4 of the patent, and adapted to be rocked or oscillated when an open or so-called herring-bone suture seam is to be formed. (Spec. p. 2, lines 105 to 119.) The patent shows mechanism for oscillating the stops.

It is a fact that at the date when plaintiff placed the attachment upon the market, the closed split-seam had superseded the open split-seam in popular favor, (R. I, 105), but the claim that the open split was not commercial is directly against the evidence. (Hemmerich, R. I, 64, 65; 68; Goetsch, R. I, 128, 130, 131.)

Apart from that, however, the patent discloses a device adapted to be used, as well known in the art, for either open split-seam work or closed split-seam work, whichever the operator preferred, and also for making reinforced designs as specifically explained in the specification. It,

therefore, follows that even if it were true (which it is not) that the device shown and described could not be utilized at all for making any form of open split-seam at an angle to the wales of the fabric, there would still be no basis whatever for the defense of want of utility. The specific pivoted undercut stops shown in the patent in suit had been known and used for thirty years for split-seam work, both open and closed, and for splicing or reinforcing work, and when employed for the latter work, as well as for closed split-seam work, it was the practice by well known means to disconnect the oscillating means and use the stops without oscillation (Meyer, R. I, 37-39 ; Hemmerich, R. I, 66, 67). As stated in the patent, lines 92 to 98, page 2:

> "The special rod-stops 7,7 (see Fig. 1) employed in my novel attachment, act in a manner similar to the action of the well-known 'Split-foot' stops heretofore employed in making split-seam work, which stops, however, merely oscillated and did not travel lengthwise of the machine."

In other words, the stops and their function are well known, and what the patentee has done is not to invent a new form of stop, but his invention lies in controlling the movement of the stops lengthwise of the machine, which he does by his reversely threaded spindle and automatic reversing means, in conjunction with the regular control of the full-travel bars by the end stops.

Moreover, the patent expressly states that while a particular form of stop is shown in the drawings, the invention is not limited to the use of these specific stops nor to the making of any particular form of seam (see specification, page 2, line 101, and same page, lines 120 to 124). The reference to plain or solid stops, not undercut, for making spliced or plaited figures is a reference to stops which were thoroughly well known in the art and required no illustration. (R. I, 67, 87.)

Neither the patent in suit, nor the device there shown and described, nor any of the claims in issue, is limited to split-seam work—much less to two-needle open split as distinguished from four-needle, or to open split as distinguished from closed split.

The District Court's treatment of this subject will be found in its Opinion at R. II, 743, 744, and we submit it is clear that no error has been shown.

E. Alleged Delay in Filing a Disclaimer.

1. An alleged unreasonable delay in filing a disclaimer involves a special defense which must be pleaded. Zell vs. Bankers Utilities Co., 77 Fed. (2nd), 22; Trussell Manufacturing Co. vs. Wilson-Jones Co., 50 Fed. (2nd), 1027 at 1030; Burden vs. Corning, 4 Fed. Cases, 701 at 710; Worden v. Searls, 21 Fed. 406. No such defense was raised by the original pleadings or any amendment thereof.

2. Claims 7, 8 and 10 discussed under this point in defendant's brief in the Court of Appeals were not placed in issue by the pleadings, the plaintiff suing only on claims 1, 3, 14 and 15 of the patent in suit. Not only was there no notice of the defense in defendant's pleadings, but no reference was made thereto at any stage of the trial, and plaintiff obviously had no opportunity to submit, or reason for submitting, evidence on any such issue. It is not the practice of the courts to pass on the validity of claims not in issue, for the purpose of determining the necessity of a disclaimer with respect thereto. (Gamewell Fire Alarm Telegraph Co. vs. Municipal Signal Co., 77 Fed., 490; Sirocco Engineering Co. vs. B. F. Sturtevant Co., 209 Fed., 624; American Bell Telephone Co. vs. Spencer, 8 Fed., 509; Aluminum Colors, Inc. vs. United States Research Corp., 7 Fed. Sup., 609.)

3. Nothing in the Record establishes the invalidity of any of the said claims or tends to do so.

As to claims 7 and 8, the alleged invalidity is based upon the omission of narrowing cams, an attack without merit, which has been fully answered elsewhere (supra pp. 39, 40). As to claim 10, the witness Meyer (R. I, 89, 90), did not admit that the tilting of the stops referred to in that claim is not effected by pattern controlled means, as the claim requires, but merely stated that it is not effected by pattern *chain* controlled means. Further, defendant refers to auxiliary pattern chains 50 and 70, but has overlooked the pattern chain of the fullfashioned machine which shifts the main cam shaft in narrowing. The shifting of the cam shaft prevents the tilting of the stops, and in that sense, if in no other, the means for tilting the stops as set forth in the claim can be said to be pattern controlled. The fact that a disclaimer was filed is not an admission that the claim disclaimed was invalid or that a disclaimer was necessary (Permutit vs. Wadham, 13 Fed. (2nd), 454; United Chromium, Inc. vs. International Silver Co., 60 Fed. (2nd), 913; Lowell vs. Triplett, 77 Fed. (2nd), 556; Bay State Optical Co. vs. Klein, 20 Fed. (2nd), 915). In fact, the disclaimer entered by the plaintiff as to claim 10 contains no such admission.

4. Under the conditions here, the necessity for disclaiming could not arise until there had been an adjudication that the claims are in fact invalid. The plaintiff had the right to rely upon the presumption of validity as to the claims arising from the grant of the patent. (Ensten vs. Simon Ascher Co., 282 U. S. 445; Aluminum Colors vs. U. S. Research Corp., 7 Fed. Sup., 609).*

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* As a matter of fact, the disclaimer was filed within thirty days after plaintiff's first notice of defendant's contention of invalidity of the claim. The matter, of course, was not in issue in the suit, and the first intimation of defendant's contention of invalidity came in defendant's brief.

F. Infringement.

Defendant's attachment is shown in the photographs, Plaintiff's Exhibit 2, (R. II, 354) and in the perspective drawing, Plaintiff's Exhibit 34 (R. II, 382), described at R. I, 54. It follows in all substantial respects plaintiff's commercial attachment as shown in Exhibit 33 (R. II, 381), explained at R. I, 52, and the Hofmann attachment involved in the prior litigation, Plaintiff's Exhibit 35, (R. II, 383), and see R. I, 56, 57. It responds fully in terms and substance to the claim in suit.

As in the case of plaintiff's commercial attachment, Plaintiff's Exhibit 15, and the Hofmann attachment, Plaintiff's Exhibit 35, defendant's attachment has a single chain for controlling the timing and selecting mechanism as a substitute for the two separate chains 70 and 50, shown in the patent in suit. The mechanical equivalency of a single pattern chain with two separate groups of buttons for the two separate pattern chains of the patent is obvious, (R. I, 52-55 and see opinion (R. II, 770, 771).

In fact, the equivalency is so clear that in the Hofmann suit, involving an attachment with a single chain and two rows of buttons, the mechanical equivalency of the controlling mechanism for that shown in the patent in suit was deemed so plain that infringement of the claims in suit was admitted by the defendant,—defendant's counsel in the Hofmann suit being the same counsel who are defending this suit.

The contention that claims 14 and 15 call in terms for two separate pattern chains is incorrect. The separate means referred to in the claim are the timing and selecting means, and obviously, these means are both pattern controlled, whether controlled by separate chains or by a single pattern chain with separate rows of buttons as an obvious equivalent.

In the Court below the defendant raised the point that defendant in its device is employing specially improved

stops adapted to make a two-needle split-seam; whereas, the specific form of stop shown in the patent in suit is only adapted to make a four-needle split which defendant claims is less desirable, but the claims in suit are not specifically directed to the use of oscillating undercut stops. Other claims, as for example, claims 11 and 12, are directed to that feature, but these claims are not involved in this litigation. The claims in suit are not directed to any specific form of stop, but to a combination of parts whereby stops of any well-known character, whether split-seam stops or splicing stops, are controlled and operated in a particular manner in connection with the cooperating parts of a full-fashioned knitting machine to make a wide variety of designs on hosiery. Obviously, defendant cannot escape a charge of infringement of claims such as these, merely because it employs in the combination of the claims a form of stop which permits the making of a particular seam which the defendant happens to select as more desirable than that made by the specific form of stop shown in the patent.

Furthermore, while the stops in defendant's attachment can be utilized to make a two-needle split-seam, they can also, at will, be utilized to make the four-needle split for splicing, in exactly the same form and manner as the stops in the plaintiff's commercial attachment.

What defendant is doing, therefore, is furnishing an attachment embodying the combination of the plaintiff's patent, and responding fully to the claims in suit, with an added device (the connection for raising and lowering the pin-stops) to adapt the device to make a particular form of split-seam. Such addition (of no use at all except with plaintiff's combination) cannot relieve defendant of the charge of infringement on well-settled principles (Walker on Patents (6th Ed.) p. 496; Sec. 409; Temco Electric Co. vs. Apco Mfg. Co., 275 U. S., 319; Malina vs. Grisman, 20 Fed. (2d) 406; Barber vs. Otis Motor, 231 Fed. 755, 762; Stebler vs. Riverside Heights Assoc., 205 Fed. 735, 739). But if it could, when it is shown, as it clearly is by the stipu-

lated photographs, that the added connection is adapted to be put out of operation and the pin stops used as ordinary split-seam and splicing stops, the whole argument attempted to be based on two-needle split falls to the ground —a machine that infringes part of the time is an infringement, although it may at other times be so operated as not to infringe. Wright Co. vs. Herring-Curtis Co., 211 Fed., 654, 655; Westinghouse Co. vs. Precise Corp., 11 Fed. (2nd) 209.

Where, as in this case, a patentee's device has achieved a commercial and practical success and has added something of real value to the industry, he is entitled to broad claims, and to a liberal construction of those which he has made. Sam'l B. Smith vs. E. H. Snow et al., 294 U. S. 1. There has been no division among Courts below on this question of infringement. We submit that there has been no error.

CONCLUSION.

In this case, we submit, the equities are clearly with the petitioner. Through the invention of the patent in suit, it has supplied an attachment which represents an undoubted advance in the industry. The device is of that type which it is the object of the patent system to encourage. The Courts of the Third Circuit, and the District Court in the instant case, found the patent valid after careful scrutiny. The Court of Appeals of the Second Circuit, in reaching a contrary conclusion, fell into error in the respects which have been pointed out.

We respectfully submit that the prayer of the petition should be granted, the ruling of the Court of Appeals reversed, and the decree of the District Court affirmed.

Respectfully submitted,

HUBERT HOWSON,
CHARLES H. HOWSON,
DEXTER N. SHAW,
WILLIAM A. SMITH, JR.

APPENDIX "A".

IN THE
DISTRICT COURT OF THE UNITED STATES
DISTRICT OF NEW JERSEY.

IN EQUITY.

E-4219.

TEXTILE MACHINE WORKS,
Plaintiff,

v.

ALFRED HOFMANN and ALFRED HOFMANN, INC.,
Defendants.

OPINION.
(Filed October 16th, 1933.)

AVIS, *District Judge:*

The bill of complaint in this cause alleges that the plaintiff is the owner of a certain patent, No. 1713628 issued to Richard E. Schletter on May 21, 1929, covering an attachment for flat knitting machines for the making of hosiery of full fashioned type, especially adapted for making clocks, reinforcing, split seam work, splicing, &c.; that defendants have infringed the patent, by the use of the appliances patented in an attachment sold and marketed by them, and prays for relie by injunction and accounting.

The answer admits the issuance of the patent, but denies that Schletter was the inventor of the improvements in the attachments for flat knitting machines, described in the Letters Patent and the other claims set forth in the bill of complaint, and affirmatively avers that Schletter had abandoned his invention, and did not assert any claim thereto until after others had independently made large investments in connection with the manufacture and sale to the public in the United States of attachments embodying his claimed invention; that plaintiff was and is barred by his abandonment of a prior application; that Schletter was not the inventor, and was barred by anticipation in sundry other patents, and by prior use by others. The answer further sets up various patents issued in the United States, Great Britain, Germany and France, various publications and users, claiming them to be a complete bar to plaintiff's right to an exclusive use of the attachment.

Based on these various allegations of fact, the answer claims that because of the state of the art as known at the time and prior thereto, the alleged invention or discovery did not involve invention, but exhibited nothing more than the exercise of mere mechanical skill.

At the opening of the trial, the bill of complaint against Alfred Hofmann, as an individual, was dismissed, on motion of defendant's counsel, and with the consent of counsel for plaintiff.

The claimed invention is a machine which can be attached to, or built with a flat or straight hosiery knitting machine, used for the purpose of making full fashioned stockings.

The basic knitting machine is constructed under the original "Cotton" invention, with such changes and improvements as have been made from time to time. The knitting is accomplished by a battery of straight needles operating with sinkers, dividers, &c., and by various forms of mechanism provided with power through arms, gears, slur cocks, carrier bars, shafts, rollers, clutches, cams, &c.,

and actuated by power transmitted from what is known as the cam shaft. Attached to these machines is a mechanical contrivance, called a narrowing device, by which the full fashioned stocking is made.

A full description of the operation of this full fashioned knitting machine, as detailed by the witnesses, does not appear to the Court to be necessary in the decision of the question at issue. It is sufficient to say that the operations of the machine are complicated, and by cooperation of all of its parts turns out a perfect product.

For the purpose of laying the thread for contact with the needles and attachments required to tie the knots and do the knitting, longitudinal reciprocating yarn guide carrier bars are arranged on the machines, their movements in both directions controlled by stops, so that the thread will be laid and knitted the required width of the material to be produced. The width of the main material is controlled by stops arranged at either end of the plurality of knitting sections, in which form the machines are usually assembled in practical operation. For the purpose of narrowing the fabric as desired, and prior to plaintiff's claimed invention, reversely threaded spindles were attached to each end of the plurality of machines, which operated by a pattern chain and buttons connected therewith, caused the stops to move inward toward each other, and in conjunction with a device which removed the threads from the outer needles, replacing them on the immediately adjoining needles, accomplished the narrowing and thus formed the full fashioned stocking, made to conform to the natural shape of the leg.

As new styles of hosiery were demanded by the purchasing public, the art advanced to meet the demand, and new attachments were added to accomplish split seam work, selvage reinforcement, splicing, Onyx and pointed heels, shadow clock work, &c.

The attachments were so contrived as to lay threads from the yarn carrier bars, on the needles, with a stroke

less than those carrying threads for the main material, and in cooperation with the main thread carriers, to accomplish the splicing, clock work, reinforcing, &c.

These various attachments, invented and used prior to the attachment represented by the patent in suit, have been demonstrated and described by sundry witnesses.

By manual manipulation of some character, they produced nearly or fully the same result as can be produced by plaintiff's attachment.

The plaintiff's patent describes a claimed new development, which consists of a connected reversely threaded screw spindle, which may be located on a knitting machine individually or at some point in a plurality of machines, with nuts mounted thereon, being stationed one on the right side and one on the left side of the screw, and spaced apart at such distance as may be desired; upon the rotation of the spindle in one direction, the nuts are brought closer together, and when operated in the other direction the distance between the nuts is widened. Attached to the nuts are tiltable stops, intended to limit the stroke of certain of the yarn carrier bars, by means of certain stationary lugs fastened to the bars, thus laying the additional thread on the needles at such point within the length or width of the material being knitted as may be desired, and producing splicing, reinforcing, clocks, or other inserts.

In addition, the patent contemplated the automatic control of movement of the reversely threaded spindle, so that by means of levers, pattern chains, pawls and ratchets, mechanically connected with the main cam shaft, the spindle may remain stationary or be revolved in either direction, causing the nuts to approach or recede from each other, and produce any desired pattern.

A further description, in this opinion, of the mechanism involved, appears to be unnecessary.

This suit involves five claims of the patent, which are as follows:

"1. In a straight knitting machine having cooperating yarn guide carrier bars, a pair of opposed stops for certain of said carrier bars which have a stroke less than the full width of the fabric being knitted, and a reversely threaded spindle for moving said stops toward and from each other to vary the stroke of the bars controlled by said stops.

2. In a straight knitting machine having cooperating reciprocatory yarn guide carrier bars, a reversely threaded spindle, stops connected to the spindle positioned to limit the traverse of certain of the cooperating carrier bars to less than the full width of the cloth being knitted, and pattern controlled means for turning said spindle to vary the distance between said stops.

3. A device as in claim 2, said pattern controlled means being constructed and arranged to turn said spindle either to increase or to decrease the distance between said stops.

14. In a straight knitting machine, a set of yarn guide carrier bars for operating yarn guides traveling less than the full width of the fabric being knitted, a spindle having reversed screw threads, stops operated by said spindle, means for turning the spindle in either direction, pattern-controlled means for determining the time of operation of the spindle, and pattern-controlled means for determining the direction of rotation of the spindle.

15. In a straight knitting machine, a set of reciprocating yarn guide carrier bars including bars having a stroke less than the width of the fabric being knitted, pair of stops for said guides, a reversely threaded spindle extending lengthwise of the machine, the respective stops being connected to the reversely threaded portion of the spindle for moving the stops simultaneously toward and from each other, pattern-controlled means for determining the time for such movement, and cor-

related pattern-controlled means for independently determining the direction of such movement."

Defendant admits that if the patent is valid, it has infringed, but sets up four reasons which it claims demonstrates the invalidity of the patent:

1. Because of insufficiency and inoperability of disclosure.

The disclosure of the drawings showed some deficiency in the imparting of motion to one of the pawls, intended to work one of the ratchets, which imparts motion to the reversely threaded spindle, but it appeared by the testimony that although this condition existed in the drawing, it required merely a matter of mechanical skill to arrange a lever or other mechanism, to be actuated by the cam shaft, to accomplish the result intended. It is apparent that if mechanism could be and was constructed, so as to automatically revolve the spindle in one direction, it would not be mechanically difficult to actuate the pawl which was to revolve the spindle in the other direction.

The explanation contained in the patent describing its operation and general method of imparting the power, in my opinion, overcomes the defect appearing in the illustration. This objection does not refer to the idea, but only to putting that idea into effect, which, it appears to me, is not a material defect.

2. Because of want of patentable novelty and complete anticipation.

It is true that the advance in the art, if any, as accomplished by Schletter in this patent, as we view it now after seeing the attachment operate and the result of its operation seems simple and appeals to one as exhibiting merely the result of mechanical skill, but, notwithstanding the fact that the so-called "Gotham" attachment interposed as an anticipation, and which of all offered most nearly coincides

with plaintiff's patent, had been used for possibly ten years, no one before Schletter had conceived the idea, that by simply providing a pawl and ratchet, which would operate the spindle in the opposite direction, a great advance would be accomplished. He apparently thought of this as an advance in the art, and set to work to accomplish it, by arranging automatic means, so that the spindle would remain stationary, or could be operated in either direction automatically and by predetermined pattern arrangement.

In my opinion, it has patentable novelty, and is an advance in the art over the so-called "Gotham" attachment, which automatically caused the nuts to move in one direction only, requiring the use of manual power to widen the distance between the nuts, or to revolve the spindle in an opposite direction. The last named attachment could not automatically vary the width of the clock or splice.

While the patent in suit combines much of the prior art, it describes and discloses an attachment which, applied to flat or straight full fashioned knitting machines, and used for the purpose of splicing, reinforcing, &c., accomplishes its purpose in a different manner, and as applied to the manufacture of hosiery, is a decided advance in the art, performing its function more expeditiously than any contrivance or attachment previously used.

See, Diamond Rubber Company v. Consolidated Rubber Tire Company, 220 U. S. 428; National Hollow Brake-Beam Co. v. Interchangeable Brake-Beam Co., (CCA 8) 106 F. 693; Krauth v. Autographic Register Co. (N. J.) 285 F. 199, 204.

There is a presumption of the validity of a duly issued patent, and an evidence of the advance of the invention of Schletter over the prior art, is the popularity of the attachment; the large sales, and the fact that defendant appears to be anxious to use it as an attachment to its flat hosiery knitting machines.

See, Kinloch Tel. Co. v. Western Electric Co. (CCA 8) 113 F. 659-665.

What has been said applies also to the contention of de-

fendant as to "complete anticipation". It is impossible in this opinion to analyze all of the patents presented, and about which testimony has been offered; suffice it to say that the Court has scrutinized the testimony, carefully read the briefs, and has concluded that none of the prior patents is anticipatory of the claims of plaintiff at issue in this suit.

3. The contentions of defendant because of prior knowledge and use, are, as the Court views all of the testimony, also disposed of herein.

While the plaintiff's attachment in a degree is evolved from the uses of former and other devices attached to flat knitting full fashioned machines, the question is the novelty of plaintiff's patent, of furnishing, as stated in defendant's brief, "the necessary mechanism for automatically imparting reverse motion to the spindle of the Gotham attachment".

Of course, this included the mechanism which reverses and advances the nuts and stops in a predetermined manner by use of pattern chains, or other automatic mechanical means.

4. The question of abandonment has been raised by defendant and is based upon the assumption that the facts indicate that Schletter intentionally abandoned his invention to the public.

The failure to prosecute the proceedings under the original application for patent, appears to have been due entirely to the negligence of the patent attorney.

There is no indication in the evidence that Schletter ever voluntarily intended to abandon his invention.

From the testimony it is evident that Schletter never knew of the letter of rejection until long after it was received by his attorney. The letter was received by the attorney on or about April 18, 1923, and Schletter was not notified until July 28, 1924.

The attorney testified that at a conference held August

5, 1924 with Schletter and others, no suggestion was made by him that the original application had been technically abandoned. After this conference, the attorney made no effort to revive the application, and it is apparent that later, Schletter, becoming discouraged because of lack of action, consulted another patent attorney, who, on or about May 20, 1925, wrote to the attorney handling the original application for information.

The filing of the second application was considerably delayed because of the tardiness of the draughtsman.

There seems to have been much uncalled for neglect and delay, but the testimony is quite clear that none of this was chargeable to Schletter personally.

I am convinced that Schletter never, by his actions, abandoned his invention, and the claim of abandonment cannot succeed in denying relief to plaintiff.

I find as facts:

(1) That claims 1, 3, 14 and 15 of the patent in question are valid.

(2) That said claims of patent are not anticipated by patents pleaded and offered in evidence, or voided by prior knowledge or use.

(3) That patentee Schletter did not voluntarily or intentionally abandon the invention as disclosed by the original patent application.

(4) That the defendant Alfred Hofmann, Inc., has infringed the aforesaid claims of the patent.

As to the law, I conclude:

That the patent being valid and infringed, the plaintiff is entitled to a decree enjoining defendant Alfred Hofmann, Inc., from the use of the attachment so infringing, and for an accounting for damages and profits.

Decree accordingly.

APPENDIX "B".

IN THE
UNITED STATES CIRCUIT COURT OF APPEALS
FOR THE THIRD CIRCUIT.

No. 5312. March Term, 1934.

ALFRED HOFMANN, INC.,
Defendant-Appellant,

v.

TEXTILE MACHINE WORKS,
Plaintiff-Appellee.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES, FOR THE DISTRICT OF NEW JERSEY.

OPINION.
(Filed June 15, 1934.)

Before BUFFINGTON, WOOLLEY and DAVIS, *Circuit Judges.*

BUFFINGTON, *J.*

The patent involved in this case was so thoroughly discussed in Judge Avis' opinion that we find ourselves in no position to improve on what he has said. After due consideration, we are of opinion the decree below should be affirmed, and affirmed on his opinion. In so doing, we note that this patent presents an unusual state of affairs.

What was known as the "Cotton" knitting machine had been in use for many years. Its construction involved some one hundred patents. The machine cost $10,000. The plain-

tiff devised a mere attachment, costing some $350, which can be attached to the $10,000 machine, and gives the latter a wide sphere of manufacturing capacity which it did not before possess. This attachment was so valuable—and there is no contradiction as to this—that no one would now buy one of these $10,000 machines without having an attachment such as the plaintiff's patent disclosed. Its worth is evidenced by the fact that in four years following the issue of the patent, six thousand of these attachments were sold at a cost of more than $2,000,000. When this patent was disclosed to the plaintiff, an extensive manufacturer of knitting machines, the patentee was at once paid $20,000 for it. We have a finding by the patent office of the fact of invention. We also have the fact of invention found by the trial court. We see no reason to disturb such findings. Accordingly, the case is affirmed.

A true Copy:

Teste:

Clerk of the United States Circuit Court of Appeals for the Third Circuit.

APPENDIX "C".

DISCUSSION OF PRIOR PATENTS ADVANCED BY DEFENDANT AS ANTICIPATIONS. SEE SECTION C, PAGE 41 SUPRA.

Mather British Patent No. 7,476 of 1837.

This patent is explained by plaintiff's expert at R. I, 292. The machine is not a Cotton machine but an independent needle machine, and the reciprocating carrier bars involved in the combination of the claims of the patent in suit are, therefore, lacking.

There are two sets of thread carriers, one set for plain work and an additional set for making heel tabs. There is no reversely threaded spindle, and such spindles as there are, are turned solely by hand. As the reference thus relates to a different type of machine, does not involve an attachment, is not adapted for any type of work similar to that of the patent in suit, illustrates only hand-operated spindles, and therefore, discloses no mechanism of any character for automatic control, it is difficult to see what bearing the reference can be thought to have upon the subject-matter in controversy.

The yarn carriers in the independent needle machine are controlled in a manner totally different from that involved in the Cotton machine, and the problems involved are entirely different, (see Meyer in his discussion of the Rowlet Patent at R. I, 260, 261).

Roe British Patent No. 1991 of 1869.

This reference is discussed by plaintiff's expert at R. I, 288.

The machine is an independent needle machine. There are no auxiliary carriers for making designs, and such carrier control as there is in the machine is simply the usual control of carriers traveling the full width of the fabric being knitted, the sole purpose of changing the travel of the

carrier being for the usual narrowing of the stocking. It will thus be seen that the machine of the reference in its type, its product, and its functioning makes no approach whatever to the combination of the claims of the patent in suit. Further than that, no mechanism is shown for operating the narrowing spindles, and particularly, there is an entire absence of any reference to or suggestion of automatic reversing mechanism for the spindles. Plaintiff's expert disagrees with the suggestion made by the defendant's expert to the effect that the separate threaded spindles could be formed in one piece.

Willat, et al. British Patent No. 573 of 1871.

Plaintiff's expert discusses this patent at R. I, 286.

Here again, we have an independent needle machine. There is no reversely threaded spindle. Such spindles as there are, are at the opposite ends of the machine; and they are used solely for controlling the carriers traveling the full width of the fabric being knitted. In other words, there is no control of auxiliary short-travel carriers in combination with full-travel carriers and no design work of any character can be done. Furthermore, the operation of the spindles regulating the position of the end stops is entirely by hand, no automatic timing mechanism being disclosed or suggested. The reference makes no approach to being an anticipation of the subject-matter of the patent in suit.

Woodward British Patent No. 19,627 of 1891.

This patent is discussed by plaintiff's expert at R. I, 271.

Here again, the only stops are the regular end stops for full-travel bars. There are no auxiliary stops and no short-travel bars. There is a reversely threaded spindle for controlling the narrowing points and the end stops together, but even this is without the automatic reverse, being operable in one direction only, by hand. Obviously, there is no

approach to the combination of the claims of the patent in suit, and none of the work of the latter is a possibility.

At R. I, 176, defendant's expert suggested that certain changes might be made in the Woodward device and thereby it might be adapted to produce one of the types of work for which the attachment of the patent in suit can be employed, and the demonstration of machinery made by the defendant during the trial included what purported to be the mechanism of this Woodward patent for producing a spliced clock. Plaintiff's expert testifies, R. I, 272, that the device utilized in the demonstration and purporting to represent the Woodward patent did not, in fact, represent the Woodward patent, said patent nowhere giving any suggestion or indication that it, or any part of it, could be used for splicing work; and that the controlling mechanism shown in Woodward is not adaptable at all for use in the combination of the patent in suit. It is elementary that it is not sufficient to constitute an anticipation that the device relied upon might by modification be made to accomplish the function performed by the patent in question, if it were not designed by its maker, nor adapted when actually used, for the performance of such functions. Topliff vs. Topliff, 145 U. S., 156.

Sowter U. S. Patent No. 478,527 of 1892.

This patent is referred to by plaintiff's expert at R. I, 265. There is no reversely threaded spindle. The ordinary threaded spindles shown are for the control of the narrowing points and not for the carrying bars. The device is not an attachment, does not relate to full-fashioned hosiery machines and can do none of the work for which the attachment of the patent in suit is adapted and intended.

Lieber Knecht U. S. Patent No. 981,663 of 1911.

This device is discussed by plaintiff's expert at R. I, 262.

It shows a reversely threaded spindle (see Fig. 3) with stops or slides 23 and 24 for controlling the travel of yarn guide carriers. The purpose of the device is to reduce the shocks of blows incident to the striking of the carriers bars on the stops; and in connection with this, the reversely threaded spindle device shown in Fig. 3 is utilized at the center of the machine to control the carrier bars in place of the usual end stops. The device is thus one relating solely to the control of full-travel carrier bars, and lacking entirely any auxiliary stops for controlling the short-travel bars, and thus the whole substance of the subject-matter of the claims of the Schletter patent in suit is lacking. Further than that, the reversely threaded spindle shown in the Lieberknecht patent is operated automaticallly in one direction only, and in the other direction solely by hand. None of the work accomplished by the Schletter attachment is possible with this Lieberknecht device.

Lamb and Noon British Patent No. 15,129 of 1889.

This reference is discussed by plaintiff's expert at R. I, 281.

The sole purpose of the Lamb and Noon Patent is to provide a special form of knitting machine adapted to produce fabrics having downright (vertical) stripes by split-seam work. These stripes may vary somewhat in design—as illustrated in Figs. 3, 8 and 9—but the type of work is all the same—vertical stripes formed by split-seam work away from the selvages.

The fact that only split-seam work can be done is not in dispute in the record. Miller clearly states the type of work (R. I, 177) and Meyer unequivocally and without contradiction (R. I, 282) testifies that no splicing and reinforcing work can be done. This means that the Lamb and Noon machine was neither intended nor adaptel to do the greater part of the work for which the attachment of the patent in suit has found its utility, including the spliced

or reinforced clock-work referred to in the patent, and selvage reinforcements, such as utilized in the cradle-foot.

The patent says that plain knitting can be done *beyond* the stripe, *when the striping has been stopped* and the striping bars are locked out in the usual way. And it will be evident to the Court from the patent, and the description of the device as given by the experts, that if either of the bars 1 and 2 is to be used to traverse the entire width of the fabric, the use of the striping carriers must be eliminated, as the stops H and H′, necessary to control the inward movement of the bars 1 and 2 respectively when the striping bars are in action, prevent the travel of the bars 1 and 2 across the fabric. Use of full-travel bars and the striping bars in conjunction, which is necessary for splicing or reinforcing is neither contemplated nor possible.

The specially constructed machine for producing the single type of striped fabric involves the special striping carrier bars 3, 4 and 5 with their pair of one-way threaded spindles built into the machine at opposite ends thereof with separate controlling mechanisms also located at opposite ends of the machines, and with such end stops as are required for stopping carrier bar 1 at the right end of the machine (see Fig. 3) and bar 2 at the left end of the machine (see Fig. 3a). The stops GG′ which control the special carrier bars are mounted on the same slides which carry HH′ controlling the inward movement of the other bars (see patent page 3 at bottom) and these slides GG′ are mounted on the same brackets which carry the slides CC′ for the end stops. There are three sets of stops, one mounted on the ordinary narrowing slides with the usual spindles, and the others on additional slides provided at the ends of the machine in the same brackets with the usual narrowing slides, with an additional set of spindles (one built in at each end of the machine) for moving the additional slides.

Now it must be clear from what has been said that plaintiff's expert, Mr. Meyer, was correct when he said (R. I, 282) that the Lamb & Noon patent does not show an attachment, but a specially built machine for its own particular kind of work. As clearly shown by the patent in suit the "attachment" there referred to is a device adapted to be attached to the regular full-fashioned machine without alteration of any of the regular parts of the machine, or interference in any manner with the proper functioning of the regular machine whether said attachment is functioning or not. Such an attachment can be applied, either at the time the machine is built, or at any other time. The carriers and carrier bars are the regular carriers on the machine, and the function of the attachment is to provide an auxiliary control for such of the regular carriers as the operator may select, the full and proper functioning of all regular parts of the machine not being affected or interfered with in any way. Such an attachment is the direct antithesis of a machine, such as Lamb and Noon's, permanently provided with special striping bars controlled by spindles built into the bed of the machine, and with controlling stops the presence of which prevents the functioning of the machine as an ordinary knitting machine.

As has been fully pointed out, the claims in suit, when read as they must be, in the light of the specification, call for the combination, in the full-fashioned knitting machine, with its regular reciprocating carrier bars and the usual controlling mechanism therefor as required for the knitting of the full-fashioned stocking, of auxiliary stops for certain of said carrier bars, and a reversely threaded spindle, with suitable controlling mechanism for automatically turning the spindle in either direction—the combination permitting such control of all of the various carrier bars in the machine (by cooperation of auxiliary stops and end stops) as required for split-seam designs, or for spliced or reinforced designs at or away from the selvages. Lamb and Noon have no such combination in terms or in

substance. *They do not have the reversely-threaded spindle with its controlling mechanism as required by the claims, nor are such separate spindles and controlling means as they have, utilized with the regular carrier bars of the full-fashioned machine,* and obviously the combination of plaintiff's patent cannot be found in Lamb and Noon as the functions cannot be performed.

Defendant, of course, concedes the fact that the reference does not have the reversely threaded spindle called for by the claims, but argues that Lamb and Noon's separate spindles are simply "a reversely threaded spindle in two pieces instead of one piece". But this completely disregards the functions performed in the two cases. Lamb and Noon built in separate spindles at the opposite ends of their machine and utilized them with auxiliary stops there located (one at each end of the machine) to control their special striping bars. Schletter utilized his reversely threaded spindle for the automatic adjustment of auxiliary stops for the supplemental control of the regular carrier bars,—the spindle and its stops being so located (between the ends of the machine) as not to interfere with the regular fashioning devices, and permitting the use of the spindle and stops, not merely for making split-seam vertical stripes, but as well for various other types of design and reinforcing work, which have been fully described.

While spindle controlling mechanism is shown and described in the patent, this controlling mechanism comprises separate controls for the separate spindles, such control being located at the end of the machine with its respective spindle. The difference in the requirement of a controlling mechanism which can be used at the ends of the machine, as in Lamb & Noon, and a controlling mechanism suitable for the control of a reversely threaded spindle located between the ends of the machine, as in the patent in suit is pointed out at R. I, 272, 273; and there is not a syllable of evidence in the record to show that the spindle

controlling device shown and described in the Lamb and Noon Patent would be available for use in Schletter's combination.

This reference was cited and withdrawn by the Examiner in the Patent Office, was found insufficient by the Courts of the Third Circuit in the Hofmann suit and by the District Court here, and it is submitted that appellant has shown no error in these findings.

Muller U. S. Patent No. 1,564,438 of 1925.

This patent is referred to by plaintiff's expert at pages 408-411, 414 Rec. and as clearly explained by him would, even if early enough, fail to meet the Schletter invention. However the reference, as found by the District Court, is not sufficiently early to anticipate. The Muller application was not filed until October 20, 1923. Schletter's date of invention is June 19, 1922—see finding of fact 7 (R. I, 754). As no assignment of error was directed to this finding in the Court of Appeals, and that Court adopted the finding (Opinion, R. II, 771), it is not deemed necessary to refer the Court to the evidence in the record upon which the finding is based.

FILE COPY

OCT 13 1937
CHARLES ELMORE CROPLEY
CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

No. 62. October Term, 1937.

TEXTILE MACHINE WORKS,
Petitioner,

vs.

LOUIS HIRSCH TEXTILE MACHINES, Inc.,
Respondent.

On Certiorari to the Circuit Court of Appeals for the Second Circuit.

Petitioner's Reply Brief.

HUBERT HOWSON,
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INDEX.

	Page
1. The Claims of the Patent in Suit	1
2. Gotham (Respondent's Brief, pages 34, 35)	4
3. Nusbaum (Respondent's Brief, pages 35-37)	6
4. The Patented Device is an "Attachment"	6
5. Alleged Want of Utility (Respondent's Brief, pages 46-52)	7
6. Infringement (Respondent's Brief, pages 53-57)	8

CASES CITED.

Consolidated Roller Mill Co. vs. Walker, 138 U. S., 124	3
Duncan vs. Stockham, 204 Fed., 781 (C. C. A. 7th)	3
Fowler & Wolfe vs. McCrum-Howell Co., 215 Fed., 905 (C. C. A. 2nd)	3
Hauser Co. vs. Anton, 233 Fed., 262 (264) (C. C. A. 6th)	3
Smokador Co. vs. Tubular Products Co., 31 Fed. (2nd), 255 (256, 257) (C. C. A. 2nd)	3
Waterloo Cement Co. vs. Engel, 230 Fed., 169 (170) 240 Fed., 976	3
Winget Co. vs. Kenilworth, 11 Fed. (2nd), 1 (C. C. A. 2nd)	3

IN THE

Supreme Court of the United States

No. 62. October Term, 1937.

TEXTILE MACHINE WORKS,
Petitioner,

vs.

LOUIS HIRSCH TEXTILE MACHINES, INC.,
Respondent.

PETITIONER'S REPLY BRIEF.

1. The Claims of the Patent in Suit.

At pages 16 and 17 of its brief, respondent argues that the claims are not directed to "full-fashioned machines" as distinguished from any other type of flat or straight machines. What respondent seeks to do is to have the claims read without any regard to the meaning of their terms as utilized in the specification, and thus defeat them by reference to entirely different devices, which are put forward by respondent as responding to the literal terms of the claims. It is thus, for example, that respondent permits itself to assert (page 10 and pages 35 to 37) that "every element of each of the claims in suit is present in the Nusbaum machine". The term "straight knitting machine" used in the claims is shown by the specifi-

cation to mean "full-fashioned knitting machine". This is the machine shown in the drawings, and see the following references in the specification:

"flat knitting machine for making hosiery of full-fashioned type"—page 1, lines 2, 3;

"an attachment for full-fashioned knitting machine"—page 1, lines 25, 26;

"conventional flat knitting machine"—page 1, line 41 (see reference to "conventional end stops at the ends of the machine"—page 4, line 32);

"full-fashioned knitting machine known as the 'Cotton Machine'"—page 1, lines 82, 83;

"narrowing of the leg portion"—page 2, lines 39, 40—(narrowing refers to fashioning);

"usual and well understood manner of making full-fashioned hosiery"—page 2, lines 47, 48;

"commence the formation of the clock or clocks midway of the narrowing operation of the web"—page 2, lines 56-58;

"any well-known full-fashioned knitting machine type and to such my novel attachment is connected"—page 2, lines 71-73;

"carrier bars stopped on outward movement by the conventional end stops at the ends of the machine"—page 4, lines 30-33;

"narrowing of the stocking"—page 4, lines 57, 58.

To read the expression "straight knitting machine" appearing in the claims as meaning "full-fashioned knitting machine" is not, as respondent argues, to read something into the claims which isn't there, but to give the terms of the claims the meaning which the specification clearly shows they were intended to have.

Claims are, of course, to be construed to cover the real invention, and where necessary, for this purpose, general language in a claim may be read as referring to the particular device shown and described, to which such general language applies; thus, it is proper to read the term "straight knitting machine having cooperating yarn guide carrier bars" used in the claims as referring to the full-fashioned hosiery machine with its reciprocatory carrier bars and the usual stops therefor with which the auxiliary stops recited in the claims, cooperate in the manner fully set forth in the specification. Smokador Co. vs. Tubular Products Co., 31 Fed. (2nd), 255 (256, 257) (C. C. A. 2nd); Fowler & Wolfe vs. McCrum-Howell Co., 215 Fed., 905 (C. C. A. 2nd); Winget Co. vs. Kenilworth, 11 Fed. (2nd), 1 (C. C. A. 2nd).

Remembering that the patentee's stated purpose was to supply an attachment for making ornamental designs on hosiery which at the same time was to be fashioned, it must be apparent, we think, that the "straight knitting machine having cooperating yarn guide carrier bars" must be read to refer to the full-fashioned hosiery machine shown and described in the specification and that the devices employed in such machine for operating the carrier bars, as, for example, the mechanism for moving them and the end stops on the narrowing mechanism by which the stroke of the carrier bars is controlled in fashioning, must necessarily be implied.

Clearly, claims are to be interpreted to include necessary operative adjuncts characteristic of the machine to which the claims are directed. Consolidated Roller Mill Co. vs. Walker, 138 U. S., 124; Duncan vs. Stockham, 204 Fed., 781 (C. C. A. 7th); Hauser Co. vs. Anton, 233 Fed., 262 (264) (C. C. A. 6th); Waterloo Cement Co. vs. Engel, 230 Fed., 169 (170); and 240 Fed., 976.

All of the courts which have had the patent in suit before them, including the Court of Appeals in the instant case, have read the claims as directed to a "full-fashioned" knitting machine, and we submit, properly so.

2. GOTHAM (RESPONDENT'S BRIEF PAGES 34, 35).

(a) Gotham was not an anticipation of Claim 1 of the patent in suit. It lacked "the pair of opposed stops" called for in the claim. The auxiliary stops in Gotham were not "opposed stops" in the sense of stops acting in opposition to each other to control one or more carrier bars provided with abutments shuttling back and forth between the said stops. The stops in Gotham acted on different carrier bars and were adapted and used for a purpose totally different from that of the opposed stops called for in Claim 1.

(b) As to the other claims in suit, there is no pretense that these are met by the Gotham device, and as to these, respondent resorts to the argument that they involved nothing but a duplication of the fashioning mechanism of the full-fashioned machine. If this were correct in point of fact, it would, of course, not follow that the subject of the claims was without invention, as the addition of a duplicate fashioning mechanism to cooperate with the regular fashioning mechanism in an entirely new manner and with an entirely new result, might well represent invention of a high order. Apart from this, however, respondent's fact proposition is wholly incorrect. As illustrative of the "fashioning mechanism" claimed to have been duplicated in the patent attachment, respondent refers (brief pages 32, 33) to the fashioning mechanism shown on page 42 of plaintiff's catalogue of 1920, Plaintiff's Exhibit 6. This mechanism is explained at pages 8 and 9 of our main brief. It includes reversely threaded spindles, controlled automatically for giving the narrowing points a peculiar motion of their own, and, also one-way threaded spindles for moving the end stops automatically in one direction only. There was no reversing mechanism for controlling the latter spindles, and the controlling mechanism for the reversely threaded spindles for the narrowing points was wholly unsuited for the automatic con-

trol of the reversely threaded spindles of the device of the patent in suit.

When, therefore, respondent argues that the timing and selective mechanisms, referred to in the claims in issue, represent a mere duplication of the fashioning mechanism of the full-fashioned machine, it advances an argument without factual support. As pointed out in our main brief (page 32), the operating and selective mechanisms, employed with fashioning spindles at the ends of the machine, were not adapted for use in the combination of the claims in suit; and respondent has pointed out no controlling mechanism in the prior art adapted for such use.

(c) There was no acquiescence by the patentee, Schletter, in the rejection of certain of his claims on the Cotton British patent. There had been no final action by the Examiner finally rejecting the claims on Cotton British patent; and under the practice of the Patent Office, the applicant was either free to present an argument pointing out the differences between the references and the claims as they then stood in the application, or he was free, under the express provisions of the rules of the Patent Office, to overcome the reference by carrying his own date of invention back prior to the effective date of the reference by means of affidavits. Inasmuch as his date of invention was earlier than the date of the reference, the applicant elected to furnish the necessary evidence of that to the Patent Office, which he did. Obviously, the applicant's election to dispose of the reference by relying upon his own earlier date cannot be taken as an acquiescence in the position of the Examiner with respect to the effectiveness of the Cotton patent as a reference, nor can the action of the Examiner be taken as a final holding on the part of the Patent Office to the effect that the reference fully met the claims then in the case, for, as stated, the action of the Examiner never reached the point of final rejection.